BEING SEEN:
PARADOXES AND PRACTISES OF
(IN)VISIBILITY

MELISSA CEFKIN
MARTHA COTTON

ORGANIZERS

epic 2008
CONFERENCE PROCEEDINGS
Ethnographic Praxis in Industry Conference
15-18 October 2008, Copenhagen, Denmark

The **National Association for the Practice of Anthropology** ([NAPA](#)) is pleased to welcome you to this third annual *Ethnographic Praxis in Industry Conference*. NAPA is a section of the American Anthropological Association and supports the work of practicing anthropology by helping practitioners refine their skills, develop their careers, and market their services.

Dennis Wiedman, Florida International Univ – *President*
Madelyn Iris, Council of Jewish Elderly – *Past President*
Mary Odell Butler – *President-Elect*
Christine Miller, Savannah Coll of Art and Design – *Secretary*
Mark Curchack, Arcadia University – *Treasurer*
Laurie Price, California State Univ – East Bay
Kendall Thu, Northern Illinois Univ
Elizabeth Nanas, Wayne State Univ

The **American Anthropological Association**, the primary professional society of anthropologists in the United States since its founding in 1902, is the world's largest professional organization of individuals interested in anthropology.

Setha M Low, City Univ New York - *President*
Virginia Dominguez, Univ Illinois – *President Elect*
Dan Segal, Pitzer Coll - *Secretary*
Ed Liebow, Battelle - *Treasurer*
Florence Babb, Univ Florida
Theodore Bestor, Harvard Univ
Charles Briggs, Univ California - Berkeley
TJ Ferguson
Monica S. Heller, Univ Toronto
Jennifer Jackson, Univ Toronto
Thomas L Leatherman, Univ South Carolina
Ellen Lewin, Univ Iowa
Sally Engle Merry, New York Univ
Gwendolyn Mikell, Georgetown Univ
Deborah L. Nichols, Dartmouth Coll
Katherine Spielmann, Arizona State Univ
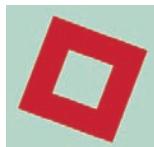
i

Introduction to the EPIC 2008 Proceedings: The Fourth Annual Ethnographic Praxis in Industry Conference

2008 marks a special year for the Ethnographic Praxis in Industry Conference – we are delighted to be hosting this, the fourth annual EPIC conference, outside the US for the first time,. The addition of new perspectives resulting from the ever increasing range and varied contexts of presenters' experiences promises to add a special richness to this year's conference in Copenhagen, Denmark.

The EPIC theme for 2008 is **Being Seen: Paradoxes and Practices of (In)Visibility**. On the streets of Copenhagen bicycles are seen everywhere. Around the world neighborhoods of the world's impoverished are as painfully visible to those who pass by or through them as they are invisible in the halls of Wall Street. Businesses attempt to make performance of their firm visible through numbers and spreadsheets, while creativity is frequently referred to as "thinking *outside* the box." Composers bring their music to light through notations and scores, chefs bring their art into view only to have it disappear, and voters attempt to have their opinions represented through the choices they make at the polls.

EPIC2008 is designed to explore the paradoxes and practices of (In)Visibility and bring to light the concepts, theories, plans, worries, approaches and ideas that can expand and advance the practices of ethnographic work in and of industry. (In)Visibility raises many significant questions on the practices and focus of attention of ethnographers and their interlocutors.

- What important issues can ethnography in industry shed light on?
- Are some ideas and things better left invisible?
- How do we work with things which are themselves essentially invisible?
- In what ways are we (in)visible as ethnographic practitioners in industry? In sites of scholarly production? What are ways of making the value of ethnographic work more visible to organizations, to participants and stakeholders, and to academic and other intellectual communities?
- Is the invisibility of theory in much ethnographic work in industry a problem, a virtue, or both?
- What invisible traces do we leave in industry?
- What do different representational practices make visible, what do they obscure, and how do other senses come into play?
- Does, and how does, ethnography's bias for observation work to balance other forms of understanding in the context of industry?

In Thanks

Moving EPIC across the Atlantic

The choice of Denmark as the first country to host EPIC outside the USA came about because Denmark has seen a surge in interest in user-driven innovation these past years, and in particular in ethnography as a way of learning about people and inspiring innovation. With ReD Associates in the lead of a growing number of anthropology consultancies many corporations are gaining experience with ethnographic praxis. The Danish government has declared user-driven innovation an approach to boost competitive position for Danish industry and has launched two programs to support industry projects and research in 2007. Also, in 2008 Denmark established the strategic research center SPIRE to develop an approach we term 'participatory innovation' that unites design anthropology with participatory design and business.

It was with some concern that the plans were made to shift the EPIC venue across the Atlantic: Would the conference be visible enough to attract European participants? Would we be able to solicit sufficient support in Denmark itself? With 350 participants, of which more than 100 came from within Denmark, that concern evaporated, and the conference turned into a success. Thanks are due to the University of Copenhagen for generously housing the conference in the beautiful old university building at Frue Plads in the midst of the city, to the local Organizing Committee, and to colleagues and students of the SPIRE Center and the Danish School of Design, who pulled a huge load in putting it all together.

We have been proud to host EPIC 2008 in Copenhagen!

Jacob Buur
EPIC 2008 Local Chair
SPIRE, University of Southern Denmark

CONFERENCE ORGANIZATION

Organizers
Melissa Cefkin, IBM Research USA
Martha Cotton, gravitytank USA

Local Chair
Jacob Buur, Univ Southern Denmark

Papers/Panel Chairs
Donna Flynn, Microsoft, USA
Jacob Buur, Univ Southern Denmark
John Sherry, Intel, USA
Patti Sunderland, Practica, USA
Simon Pulman Jones, GfK, UK

Workshop Chairs
Thomas Binder, Danmarks Designskole, Denmark
Wendy March, Intel, USA

Artifacts Chairs
Alie Rose, Copenhagen Inst of Interaction Design, Denmark
Luis Arnal, in/situm, Mexico
Michele Chang, ReD Associates, Denmark

Graphics
Ida Sejlund, Denmark

Web Solution
Magnus Kempe, Artemis Research by Design, USA

Registration Chair
Suzanne Mattingly, American Anthropological Association USA

Publication Chair
Edward Liebow, Battelle USA

Scholarships Committee Chair
Christina Wasson, Univ North Texas, USA

Local Organizing Committee
Anne Line Dalsgård, Univ Aarhus
Astrid Søndergaard, Alexandra Institute
Christian Madsbjerg, ReD Associates
Finn Kensing, Univ Copenhagen
Kasper Tang Nielsen, Univ Copenhagen
Kirsten Lauritsen, Ida Institute
Lene Vibjerg, Danish Ministry of Economic and Business Affairs
Peter Carstensen, Alexandra Institute
Steffen Jöhncke, Univ Copenhagen
Thomas Binder, Danmarks Designskole
Trine Paludan, Danmarks Designskole
Werner Sperschneider

Steering Committee
Alex Taylor, Microsoft Research, UK
Christian Madsbjerg, ReD Associates, Denmark
Christina Wasson, Univ North Texas, USA
Edward Liebow, Battelle, USA
Elizabeth Anderson-Kempe, Artemis Research by Design, USA
Elizabeth Churchill, Yahoo! USA
Jeanette Blomberg, IBM Research, USA
ken anderson, Intel, USA
Nina Wakeford, Goldsmiths Univ, UK
Rachel Jones, Instrata, UK
Rick Robinson, Design Continuum, USA
Tracey Lovejoy, Microsoft, USA

Sponsors
Platinum
Danish Enterprise and Construction Authority
Dansk Industri (Confederation of Danish Industries)
Microsoft Corporation

Reviewers

Jay Melican
Crysta J. Metcalf
Mohammed Hamid Mohammed
Graeme Mott
Dawn Nafus
Kasper Tang Nielsen
Julian E. Orr
Martin Ortlieb
Kimberly Pierce
Jo Pierson
Rich Radka
Nimmi Rangaswamy
Dave Randall
Bridget Regan
Lisa Reichenbach
Noah Richardson
Simon Roberts
Rick Robinson
Frank Romagosa
Astrid Såndergaard
Tony Salvador
Diane Schiano
Heinrich Schwarz
Werner Sperschneider
Susan Squires
Nelle Steele
John Tang
Alex Taylor
Suzanne L. Thomas
Inga Treitler
Joan Vinyets
Patricia Wall
Pamela Walshe
Christina Wasson
Nancy White
Bari Wieselman Schulman
Helga Wild
Susann Wilkinson
Matthew Yapchaian
John Young
LiAnne Yu

Contents

SESSION 1
WORKING AND PLAYING WITH VISIBILITY
JOHN SHERRY CURATOR

PANEL: DIRECTORS OF THE FUTURE
JACOB BUUR & LUIS ARNAL, MODERATORS

SESSION 4
IN SIGHT ON SITE; REVEALING AND SUSTAINING VALUABLE KNOWLEDGE FOR CORPORATIONS
SIMON PULMAN-JONES, CURATOR

WORKSHOPS
THOMAS BINDER AND WENDY MARCH, CURATORS

x

ARTIFACTS
LUIS ARNAL, MICHELE CHANG AND ALIE ROSE, CURATORS

xii

OPENING KEYNOTE ADDRESS: The Corporate Gaze – Transparency and Other Corporate Visions

Christina Garsten
Stockholm University

In an expanding global economy, the notion of 'transparency' has gained increasing currency as an organizational goal. In a wide variety of situations, increased transparency is held up as a preferred point of direction for organizations, public as well as private. The notion of transparency implies visibility, possibilities for seeing through, for seeing, and being been. It carries hopes for more just procedures and open decision making processes. It suggests higher degrees of clarity, rationality and accountability. Transparency, then, is an entry-point to the understanding of contemporary society and culture and the visions and challenges that are attached to it.

The placing of transparency on the corporate agenda is evinced in the creation of corporate codes of conduct and standards for corporate social accountability. Through workshops, training sessions and consultancy services, corporate actors are learning how to 'open their books' to public scrutiny and judgement. We see it in ways of measuring and ranking performance and procedural outcomes. It is evinced as well in the use information technology and architectural design, ranging from online calendars to glassed buildings. Yet, processes of making visible certain kinds of information also involve complex negotiations regarding what shall be displayed and what shall remain hidden. It is not always in the best interest of a corporation to reveal valuable information. For example, companies often have to be reticent about providing information that may rob them of their competitive edge, and may have strong interests in being secretive about certain aspects of their activities.

The paper addresses the significance of 'transparency' for the understanding of contemporary organizational life. What broader social trends and fashions inform the call for transparency in organizations? How is transparency manifested in organizational practices? What are some of the advantages and challenges in pursuing transparency? Such questions, and other issues, will be addressed in this presentation

I would like to talk here today about a word – a word that has gain increased currency during the last years – a word that presents us with promises as well as challenges. That word is transparency.

Transparency is on the agenda of almost every organization these days (Garsten and Lindh de Montoya 2008). It is also in the news, in boardrooms, and in trade union

gatherings. It is, in other words, a salient word. I have been doing research around this word since a few years back, and in the meantime, my fascination with it has grown. So, what can be said about transparency and the corporate gaze?

Transparency has hit the headlines of practically every business journal over the last decade. On July 28 of this year, a headline in the *Financial Times* read *Transparency rules hold no fears* and on September 11, *Lack of transparency aids foreign policy aims*. In *The Economist* on September 16, another headline was *Replacing Financial Market Transparency with Trust*. These are just a few examples of a frequently occurring headline ingredient. There is something to transparency that lends it to finding its way into the corridors of corporations, of state agencies, and into pressrooms.

Transparency –as visibility, openness, communication, and access to information – is a word that travels easily. It is also one that takes many shapes and that promises a great deal. As employees, managers, or stakeholders, we have to relate in one way or another to the call for transparency. The ways in which we do this is what has interested me for some time now.

From an early age, we learn to play around with transparency. We learn to play hide and seek, we learn to keep secrets from parents, and as we grown older we learn that some things are best left unsaid. Some skeletons are best left in the closet. We also learn the value of speaking the truth, of showing evidence of having done what we were expected to, and to write our CVs in a way that provides some visibility.

Also in organizations, we play with veils, as it were. Secrecy imbues the corporation with excitement. Creative minds are at work, and innovations are being crafted. These activities are not for everyone to see. Corporations are dependent on some degree of confidentiality around their entrepreneurial activities. On the other hand they also make sure their products or services are made visible in marketing and advertisements. Employees may have to sign confidentiality agreements, but are also expected to play the role of ambassadors now and then. Organizing involves a constant balancing act of secrecy and openness, opacity and transparency. In a sense, the boundaries of a corporation are also the boundaries of transparency. Transparency is key to understanding processes of organizing.

Transparency – here understood as visibility and openness – has a futuristic inclination. It looks to the future, to improvement and development. In a general sense, it provides the corporation and its actors with a direction. It mobilizes actors to think and act in certain ways.

More transparency in processes, in decision making, in goals, visions and evaluations are difficult not to agree on. Hence, transparency is seen as the preferred way of organizing.

It has become an administrative goal that virtually all organizations (except perhaps sects, fraternal organizations, and secret societies of various kinds) strive for. In this sense, it becomes something like a promissory note, to which all kinds of rewards are attached.

Moreover, the call for transparency is directed to a variety of social actors, and to a variety of social contexts. Transparency is appearing in a number of likely and unlikely areas of our lives. In fashion, we see more and more of transparent clothes, as well as shoes. In art, we see experiments with transparent projections. One prominent example is the American artist Jenny Holler's projection of light onto the New York Library, in 2005. Many of her works in fact address the problem of achieving a just and workable balance between secrecy and transparency. In architecture, corporations as well as governments are making use of transparent, or semi-transparent, materials to suggest visibility and openness to the public. Oftentimes, though, seeing can be done from the inside out, and not the other way around, although it may seem like it. In design, we are seeing as well a playful attitude to functionality, by way of showing off interiors of everyday utensils and tools. The Macintosh computer, for example, was an early version of transparent technology.

In corporate processes, not least, transparency is manifested not just through open-plan offices and glass buildings, but also through software solutions that allow for peeping into each other's calendars. In audit processes transparency is expressed through 'opening the books', and in allowing for scrutiny of decision making processes. The economic sector is particularly subject to demands for transparency. Keyword associated with transparency are, for example: 'stakeholders', 'policy', 'audit', 'accountability', 'compliance', 'regulation', 'governance'. Transparency has been raised as an organizational goal not least in relation to the growing significance of 'corporate social responsibility', or CSR. One of the key challenges within the area of CSR relates precisely to the issue of credibility and transparency. How can stakeholders trust what businesses say about their social record in their reports? How can we know if the claims on social responsibility represent the actual practices? What institutions and practices are there to support independent certification and verification of reports and statements?

But why this call for transparency now? With the globalization of markets and the increased presence of corporate power around the world, transparency has been positioned as a way to oversee and to control market actors. Stakeholders are putting pressure on corporations to both inform and to adhere to standards or codes of conduct. In the absence of something like 'a world government' pleas for enhanced transparency are a 'soft' way to govern the market. By opening up processes of decision-making, resource allocation and financial statements for scrutiny, some legitimacy may be gained. Transparency is often hooked up with accountability and an important ingredient of effort related to CSR.

Promoting transparency is seen as a powerful way to fight corruption and generally to promote openness and more democratic procedures into the market. The power of transparency is perhaps most evident in situations of corporate crisis, or of risk. The best way to tackle lost confidence after allegations of unethical behavior such as an accounting fraud is often to plead guilty and to invite external scrutiny. Transparency appears to be a powerful remedy for corporate scandals of various kinds and serves to illustrate that the one who utters the word has nothing or at least little to hide.

Moreover, we can see how this goes hand in hand with a general tendency to trust numbers, facts, and measures. What can be calculated, measured and seen, can also be judged evaluated and ranked. That which is less visible, opaque, or otherwise murky, remains in the shadows of performance measurement. In the quest for determining 'best practice', a degree of visibility and measurability comes in handy.

We can then see that the call for transparency impacts on organizational practice in ways that often are decisive. It opens opportunities for observations and reflection, just as it poses challenges. Where does transparency end? When is opacity not so bad? What about integrity?

More questions arise: Is transparency by nature a disciplinary technology? We may bring to mind Jeremy Bentham's notion of the Panopticon (Bentham 1995), as a tool for disciplining inmates. Or, is transparency one of the regulatory tools we need to secure the trust and well functioning of organizations? May transparency deliver empowering capacities to actors, and provide room for human initiative and integrity?

Michael Power at London School of Economics has suggested that audit, in which transparency is a significant part, is essentially a technology of mistrust (Power 1997). Attempts to make visible organizational procedures inevitably lead to new demands for visibility. There is virtually no end point to demands for more openness and visibility. We end up in a vicious circle of mistrust. Would it be possible to think of transparency as a technology of trust? What does transparency mean?

The way I define transparency, and a common way to understand it, is that it implies visibility, openness, and communication. A transparent object or process is one that can be seen through. But there is nothing absolute about transparency. Part of it escapes clarity. As pointed out by the sociologist Zygmunt Bauman (Bauman 1998), what is legible and transparent for some, may be dark and opaque for others. It is always a matter of position and degree. And here lies the power of transparency in organizational life: it can be played with, negotiated and temporarily agreed upon.

Vision, seeing and seeing through, is a way of engaging with the world. Transparency can be understood as a gaze moved with a particular concern and from a particular point. It can mean a lot of different things, and it involves social dynamics. I'll give you some examples of different ways of seeing through. We might think of seeing through in relation to a process of outsourcing of production, or seeing through the decision-making process of a corporate board. By extension, the make something transparent can also involve making it amenable to observation, like the London 'ring of steel', made up of thousands of CCTV cameras, makes millions of people amenable to observation. Or, we may think of making the adherence to workers rights conventions transparent by close observation of the conditions for daily working life. It might be that we want to make something transparent in the sense of keeping an eye on it, watching closely what is going on. Greenpeace, for example, may be watching out for seal hunting outside the Norwegian coast, or an external verification consultant may be watching closely the adherence to standards for CSR. Of course,

transparency can also be understood mainly in relation to a corporate board or a stakeholder group disclosing information. Oftentimes, this is not just any information, but sensitive, embarrassing or devastating information.

Ultimately, transparency may provide us with that piece of information that is required for us to believe, to trust, the person we are dealing with; our colleague, our business partner, or our competitor. So, by extension, transparency becomes connected to something that is good and perhaps necessary for relations, for markets and for organizations to function smoothly.

I remember a conference on transparency I went to as part of doing an ethnography of CSR. In an upscale hotel in Miami, a couple of years ago, hundreds of business leaders had gathered to discuss leadership through the lens of transparency. The workshop took the form of sharing experiences of ethical dilemmas, telling about both bad and good decisions made, and about how to disclose or hide them from the public. One of the conference delegates, a man in his early forties, talked about transparency as being 'a personal thing'. Transparency is about communication, about sharing, he emphasized. 'It's a personal thing', he claimed. He then told about a serious dilemma of his in the aftermaths of a corporate scandal, which led him to leave the company and start up his own consultancy. Him, and others with him, underlined the element of volition to be significant for transparency. Transparency is best undertaken voluntarily. Involves ethical reflection, a meeting with oneself. As this man said, 'It goes beyond what you would like to know'.

Transparency, I suggest, is essentially a relational matter. The relational component takes us straight into the world of corporations. Here, transparency is about administrative clarity, corporate governance, organizational communication, opening the books, management and control of employees and partners. For example, the Swedish company Gambro has made the topic of 'risk transparency' an important feature of their yearly report. In 2005, they were awarded the 'Risk Transparency Award' by the consultancy Ernst & Young. The award is given on a yearly basis to companies that are seen as role models and provide good examples of how risks should be reported.

That transparency is relational also implies that it is an organizational issue. Transparency relates to every core element of organization. It enters into the very heart and bone of the organization. There is no escape from the issue of transparency for organizations.

Let us look at a couple of examples of how corporations may engage with transparency! Studying how organizational keywords, such as transparency, are used in corporations, in conferences and meetings, in presentations and in documents, and as part of informal conversations, I have able to discern four metaphoric structures that represent the different ways in which corporate actors position themselves in society. These constructs may serve the purpose of illustrating different voices in the process of engaging with CSR, and how this engagement is perceived in organizational life (see Garsten 2004). For 'the

entrepreneurial corporation', engaging in CSR and in transparency is seen as a way of actually strengthening market value - a way of being entrepreneurial. Adhering to codes of conduct and showing a willingness to open up for visibility may in fact provide new business opportunities and strengthen the brand. 'The collaborative corporation' aims to engage in dialogue and partnership as ways to manage stakeholders' expectations, reduce risks, and develop new markets. Here, enhanced transparency creates more trust between partners, as a degree of openness provides information and knowledge on important business decisions and priorities, thereby strengthening relations. 'The cosmopolitan corporation' has a strong business interest in the survival of certain kinds of cultural diversity, since the market to a great extent thrives on the exploitation of diversity. Transparency may make visible the particularities of cultural values, consumer patterns and product characteristics. A fourth metaphor for the re-positioning of the corporation in the wider society is that of the conscientious corporation. This is where the call for ethics and morality is strongest, where morality testing of employees is seen as legitimate, and where transparency and accountability are endorsed as ways of 'flushing though' and 'cleansing'. Managers who give voice to this metaphor tend to give personalized accounts of their thoughts and actions in a problematic situation (just like the man in my account), of the moral dilemmas involved, and the value of integrity. Such stories tend turn into a sort of 'confessional tales', powerful in their personalized nature.

Transparency then, provides something of en ethical narrative for organizations. It may provide a narrative structure to the ways in which managers and employees alike think about and act on the sharing of information, of making visible processes of decision-making and resource allocation. In other words, transparency is a word that has the potential to provide a direction to organizational activities. It offers directionality.

As mentioned, it has been suggested that audit techniques, to which transparency is tightly aligned, are technologies of mistrust. Facts, figures, indicators, and various kinds of reports provide a robustness and degree of facticity to events and procedures. But rather than addressing and diminishing mistrust and suspicion, such endeavors may amplify doubt and suspicion. We may end up in a box-ticking exercise in which the adherence to codes of conduct are simply observed, rather than investigated. We may fall into a kind of formalized accountability that caters more to the needs of the yearly report than to empirical evidence.

Corporate actors may use what I and a colleague, Tor Hernes have called 'lightning rod strategies', to direct attention away from sensitive issues and towards others, e g best practices (Garsten and Hernes 2008). In such cases, transparency may become nothing more than a useful tool in a reputational game.

To conclude then, the corporate gaze is as much about seeing as it is about directing attention. Transparency entails both seeing and being seen, veiling and revealing, control and empowerment. It is essentially relational and organizational in character. And making visible, to greater or lesser extent, is what organizations are basically about. Transparency then, is not just a technology of mistrust, but an invitation to trust.

REFERENCES CITED

Bauman, Zygmunt
1998   *Globalization: The Human Condition.* New York: Columbia University Press.

Bentham, Jeremy
1995   'Panopticon', in Miran Bozovic (ed.), *The Panopticon Writings.* London: Verso.

Garsten, Christina
2004   'Market missions: negotiating bottom line and social responsibility, in Garsten, Christina and Monica Lindh de Montoya, eds. *Market Matters: Exploring Cultural Processes in the Global Marketplace.* Basingstoke: Palgrave Macmillan.

Garsten, Christina and Tor Hernes, eds.
2008   *Ethical Dilemmas in Management and Organization.* London: Routledge.

Garsten, Christina and Monica Lindh de Montoya, eds.
2008   *Transparency in a New Global Order.* London: Edward Elgar Publishing.

Power, Michael
1997   *The Audit Society: Rituals of Verification.* Oxford: Oxford University Press.

The Rise of the Techno-Service Sector: The Growing Inter-Dependency of Social and Technical Skills in the Work of ERP Implementers[1]

ASAF DARR
University of Haifa

This paper attempts to move away from portraying service and knowledge work as opposite trends in advanced economies. Instead, it maintains that a closer look at the changing nature of work will highlight the need to rearrange our aggregate occupational data so as to include special categories for a hybrid form: the techno-service sector. After presenting a typology of occupations based on the degree to which knowledge and service elements are intertwined, the paper analyze the work of Enterprise Resource Planning [ERP] implementers as a key example of techno-service work. It highlights the practices of 'reverse customization' and 'translation' performed by the implementers, which effectively combine service and knowledge work. The paper explains the growing inter-dependency of social and technical skills by the shift from the sale of a product to the sale of a process. This shift underpins the growing penetration of professional work into the heart of the industrial enterprise.

Introduction

Creating a so-called "knowledge economy" has become a major goal of many advanced industrial societies such as the USA and the UK (see Blair, 1998; Reich, 1993). In some of these societies this sector of the economy seems to be growing rapidly. Reich (1993), a former US secretary of labor, who sees the American knowledge sector as a key to sustained growth, claims that the number of symbolic analysts in the US workforce rose from around eight percent in the 1950s to around 20 percent by 1990. Analyzing occupational trend data between 1950 and 1990, Castells and Aoyama (1994: 23) confirm that white-collar work has expanded in the advanced economies, mostly among managers, professionals and technicians, whose occupations they term 'informational'. Barley and Orr (1997: 3) further claim that "The number of professional and technical jobs in the United States has grown by

---

EPIC 2008, pp. 8-30, ISBN 0-9799094-7-3. © 2008 by the American Anthropological Association. Some rights reserved..▯

more than 300 percent since 1950" and that "no other occupational sector has experienced nearly as great a growth rate." More recently, Hecker (2005: 71) in his analysis of the BLS occupational employment projections for 2004-2014 states: "…professional occupations are projected to grow the fastest, chiefly because they are concentrated in some fast-growing sectors, such as health care and social assistance as well as *professional, scientific, and technical services* …" (italics added). While we witness the proliferation of scholarly work about the knowledge sector and knowledge workers in the sociological and business literatures, these terms remain underdeveloped and poorly defined. This is largely due to scholars' neglect to conduct ethnographic explorations of the knowledge sector.

As Darr and Warhurst (2007) point out, sociologists in the sub-field of social stratification were the first ones to discuss the rise of what they depicted as a new middle class composed of workers such as managers, salaried professionals, technicians, some salespeople and office workers (Mills, 1951). What is unique about these workers is that they carry their 'means of production' (expert knowledge) with them. Rather than show empirical interest in the nature of the work that the members of this emerging class performed, sociologists were more inclined to discuss the political and socio-economic ramifications of what they perceived as a changing class structure.

Business scholars, on the other hand, were hardly interested in stratification changes, but instead focused on the managerial challenge posed by an emerging and highly educated class of workers, who were unlikely to simply adhere to managerial imperatives given their formal education and strong occupational communities. The managerial literature has tried to device new ideologies and control mechanisms which could allow for the effective utilization of knowledge work. Among these are team work and strong organizational cultures.

In the business literature, as well as in the sociological literature, the term knowledge work is defined broadly as white-collar workers, including teachers, lawyers, politicians, scientists, social workers, accountants and computer programmers. As in the sociological literature, the terminology describing these workers varies, and is often employed with no reference to specific occupational groups or to a clear definition of the term. What Darr and Warhurst (2007) see as common to sociologists and business scholars writing about knowledge work, is their complete neglect of work practice. Without a close look at the daily realities of the knowledge sector, they argue, there is little hope of understanding this line of work, the skills it comprises and how it is integrated into the emerging division of labor in advanced societies.

While any kind of job requires some type of knowledge, there is a set of specific questions about knowledge work which is currently left unanswered. These include: What types of knowledge are employed by knowledge workers in their daily work? What is done with this knowledge? Where is the knowledge nested (in the person, the organization, the occupational community)? These questions could only be answered by in-depth interviews and or observations of knowledge workers in action. This paper tackles a gap in the literature

by an in-depth exploration of the working experience and perceptions of implementers of Enterprise Resource Planning (ERP) software.

The ERP software is designed to create an online organization, with workflows, documents and forms going online. ERP implementers fall well within the core definition of knowledge work. This group is comprised of software engineers and programmers as well as 'content experts" such as former HR managers or economists, who have a deep understanding of a specific area in which the ERP software in implemented such as the finance or the HR department. Yet, this paper will go beyond a description of the type of knowledge and skills these workers perform. It will also question the analytical distinction between knowledge and service work, which underpins most accepted classifications of work. Service and knowledge work are often perceived as standing at opposite ends of the occupational status ladder. In contrast to this perception, this paper will point to the growing interdependency of technical and service work, and more importantly, to the rise of a techno-service sector. The workers in this sector combine in their daily work, scientific, technical and service knowledge, and the content of their work poses a serious challenge not only to existing classifications but also to training programs in science and engineering, as well as in the service sector.

The Polarization Thesis

Two seemingly opposing trends shape the current landscape of the American workforce. On the one hand, ample data point to the rapid growth of the service sector, typically described as producing low-skilled and low-paid jobs. On the other hand, the literature is replete with studies heralding the birth and rapid growth of the knowledge sector, composed of highly skilled individuals who hold college degrees and enjoy wide occupational autonomy and a high salary. These opposing trends seem to contribute to the polarization of the US labor force, that is, to the dwindling of semi-skilled jobs and of the middle class as a whole (for a review and critique of this thesis see Autor, Katz and Kearney, 2006). Figure 1 graphically depicts these two trends.

Service   **Workforce**   Knowledge

Figure 1. Major trends in the US labor force

While both trends seem to be well grounded in empirical research, sociologists as well as economists tend to treat them as vectors pointing in opposing directions. But they fail to identify the growing interdependency of service and knowledge work since they use ready-made occupational classifications and do not attempt to critically examine the changing

     Rise of the Techno-Service Sector

nature of work within occupations. I claim that the robust interface between service and techno-scientific work (which here I equate with knowledge work) creates new skill compositions and blurs traditional divisions of labor. The growing interdependency of social and technical skill is rooted in a shift in advanced economies from sales of a product to sales of a process in high-tech markets, and carries important implications for educational programs.

In emergent technology markets the substitution of a process for a product is grounded in the lack of a clear agreement between sellers and buyers about the future use of products (See Darr, 2006). For example, in the software industry sellers often sell a concept, a goal which must be negotiated and customized through a lengthy process. Likewise, software implementation (e.g., ERP systems) and various consulting jobs involve exchange of a process rather than a traditional product. More generally and in other industries, a few scholars (see Pine, 1993) have claimed that "mass customization" is substituting mass production as the main production paradigm. Computers and computer-integrated machinery, according to these writers, allow service and manufacturing firms to shift from mass production to mass batch production or mass customization. This flexibility in production also accelerates the shift from selling a product to selling a customization process. Selling a process causes technical experts to stream to frontline positions where they interact directly with the clients' representatives.

Knowledge has always been utilized in work practice. My position is that what is new about knowledge workers is the increasing integration of service and technical skills. The polarization thesis is based on income distribution of aggregate occupational data, which do not provide indicators of the different ways in which work is carried out within existing occupational titles. While I do not dispute polarization, I am opposed to the assumption that polarization occurs along the traditional service-knowledge dichotomy. Instead, I maintain that a closer look at the changing nature of work will highlight the need to rearrange our aggregate occupational data so as to include special categories for a hybrid form: the techno-service sector.

The growth of techno-service jobs has already made an impact on the US labor force. For example, Hecker (2005: 71) in his analysis of the BLS occupational employment projections for 2004-2014, point out that network systems and data communications analysts; computer software engineers, application; and computer software engineer, system software; are three out of the ten fastest growing occupations in the US labor force. These three occupations, I claim, combine sophisticated knowledge and skill with strong service elements. Others such as dental hygienists and medical assistants can also be seen as members of the techno-service sector. The growth of a techno-service sector poses a substantial challenge to our educational institutions, which tend to view knowledge workers as the ideal type of industrial R&D engineers or scientists. I suggest that simply offering students more of the same (e.g., enhancing science and math classes in K12 and undergraduate programs) will not create a better fit between many of the graduates and future labor market demands. Instead, new types of skills such as interactive social skills and the creation of a technological dialogue (Pacey, 1993) should be integrated into engineering and scientific training.

Figure 2 below represents my attempt to move away from portraying service and knowledge work as opposite trends or opposite ends on the status and income ladder and instead to create a typology based on the degree to which knowledge and service elements are intertwined in a specific line of work (see Darr, 2007).
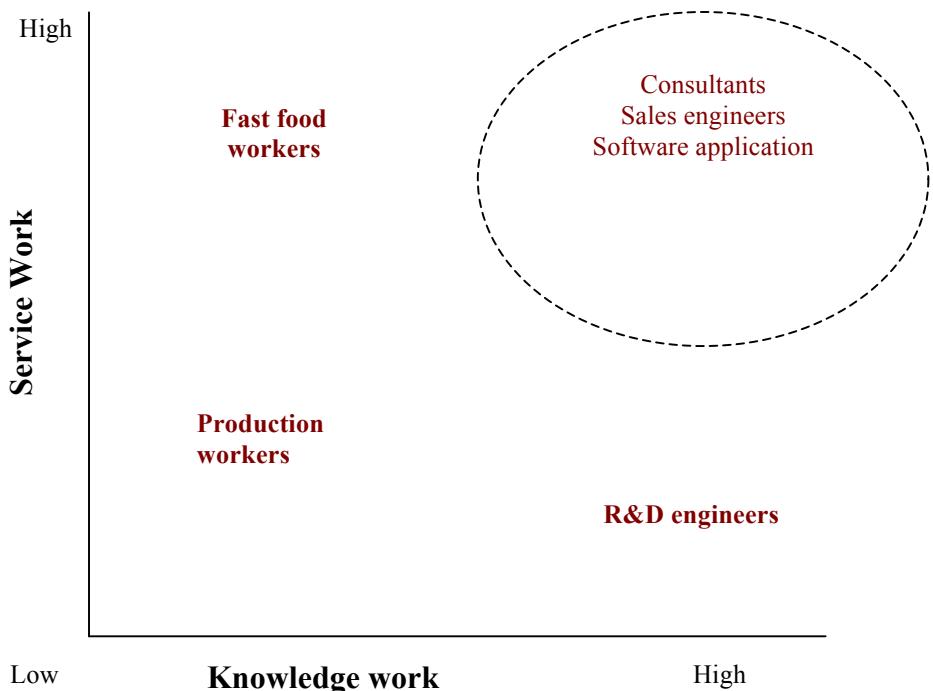
Figure 2. Occupational typology based on service and knowledge elements

As figure 2 shows, traditional manufacturing jobs are low on both service and knowledge elements. Burger flippers and waiters are high on service but low on knowledge elements. Scientists and R&D engineers, who are typically buffered from market exigencies, are low on service elements but high on knowledge elements. However, I believe that at the core of the so-called "knowledge economy" is the rise of a group of occupations that combine service and techno-scientific elements in their daily work. These occupations include, but are not limited to, software application engineers; technical support; engineering and scientific consultants; software implementers; some qualified call center workers and detailers. An ideal type of these occupations is sales engineering.

There is a growing literature which focuses on work practice, with an emphasis of the interrelation of technology and work (Bechky, 2003; Goodwin, 1997; Suchman et al., 1999) A small body of literature in sociology of work practice has recently suggested that sales departments in industries leading the current transformation of the socio-economic infrastructure are undergoing a technization process (Darr 2002). For example, in US leading-edge industries the percentage of engineers holding formal academic degrees in the sales force almost doubled during the 1980s, from 12 percent to 22 percent (US Department of Labor 1985, 1988, 1991). The BLS figures project a growth of 14 percent in the number of sales engineers in the years 2004-2014. Similarly, sales support in the software industry increasingly involves technical experts (Pentland 1997).This is a clear, yet limited, indication that knowledge and service work are intertwined. Increasingly, firms are oriented to their clients and must enhance their workers' social skills to provide quality service, in addition to exhibiting technical competence in producing high-quality goods. In this paper I focus on ERP implementers as a key example of an emerging cluster of occupations where social and technical skills are interdependent.

Research Design and Methods

At the heart of this study are data derived from 50 in-depth interviews with key players in the Israeli ERP market. Table 1 provides a breakdown of interviewees by occupation.

Table 1. Interviewees by occupation

Occupation	Number of interviewees
Project managers	6
Sales and marketing	5
Freelancers	6
Implementers working for implementing organization	9
Representatives working for client organization	12
Programmers	3
Training and education	3
Consultants	2
Entrepreneurs	2
QA	1
VC manager	1

The sample was created by a snowball technique, which began with leads provided by several different people working in implementing business software, or members of client organizations. These people suggested other potential interviewees. When one snowball stopped rolling I began another. Since the snow ball sampling started from different actors which were not previously linked, I was able to avoid the danger associated with this research method of getting caught up within a single clique.

The study also included a newspaper archival research aimed at providing the history of the Israeli ERP market. Observations were conducted at a day long sales promotion carried out in a Tel-Aviv Hotel, where SAP representatives presented the software and a line of satisfied clients to prospective buyers, all high ranking managers from very large corporations.

The initial objective of this study was to identify the different players in the ERP market and to locate each of them within the broader, and as we shall see, the global division of labor. Figure 2 provides a graphic presentation of these issues:

Main Players and Work Process in the ERP Implementation Sector:

SAP is a German company manufacturing ERP software. SAP is a giant company, with an annual income incomes of about 4.6 Billion US dollars, which represent 40% of the total revenues in this market (The Marker, Sep. 15, 2008: 34). The SAP ERP software creates an online organization, with workflows, documents, forms and authority structures all being boxed within the software, which is made up of a large number of modules. These are designed to cater to the needs of various organizational functions: finance, logistics and human resource management, among others. SAP claims that its software is standard yet very flexible, mainly due to its built in customized menus, thus requiring little if any adaptation to specific client's needs. Yet, as we shall see, implementing ERP software is lengthy and complex, and there is a flourishing sector of ERP implementers who thrive on software localization.

Up to a few months ago SAP had only one vendor in Israel, NESS Technologies, which was authorized to sell the software licenses. SAP provides technical support for organizations that have purchased their software mainly through NESS but also directly via the Internet. In addition to being, up until recently, the only licensing company for SAP products, NESS provides ERP implementation services and acts as intermediary for SAP and the Israeli clients. Given its wide array of functions, the company employs marketing, implementation, programming, and training personnel.

SAP
Software Vendor

(Manufacturer, provides
implementation &
technical support)

Oracle

Other ERP
Manufacturer

Local Distributor
(Authorized to sell SAP, employs: marketing, sales,
implementation, programming and training personnel)

Consultants

Training &
education
organizations
(e.g. John Bryce)

Quality control
companies

Big integrator
companies
(e.g. IBM)

Medium/Small
integrator companies

Freelancers

Manpower companies

Include: marketing, sales, integrator,
programmer, training & education personal.

Figure 2. Occupational typology based on service and knowledge elements

While NESS until very recently held a monopoly over licensing, it has to compete with global and local firms in the ERP implementation market. Other global implementers include IBM, which is NESS's biggest competitor, as well as HP and other companies. A number of local Israeli firms also offer ERP implementation services. These small and local companies employ a range of consulting, implementation, and programming personnel. They typically do not win significant implementation contracts, but are instead subcontracted by larger and often global consulting firms. The smaller local firms provide expert workers when there is a need, and constantly train their workforce both formally and by work experience. A few HR and head hunters also specialize in providing personnel with

ERP implementation skills, both locally and globally. Unlike the small implementers, the HR companies do not engage in any technical work or sub-contracting.

Large and Often Global Implementation Companies

The large global companies typically employ project managers and a small number of key programmers. Once they sign a contract with a client, they construct a project team led by their own employees, but composed largely of programmers and content experts which are sub-contracted from the smaller local firms. At times the global firms also hire local freelance workers who specialize in one or two software modules. I will elaborate on the unique sub-contracting system in this field when describing the division f ERP implementation division of labor.

Small/Medium Implementation Companies

Consultants: Usually with a computer system background, and who formerly worked in large organizations, these are people who help client organizations during the implementation process, from choosing the right software to quality control.

QA companies: These small consulting organizations provide quality assurance for ERP software implementation. They examine and evaluate the process of implementation as well as the outcomes. Obviously they are hired by the organization in which the implementation take place and supervise the work of the implementers.

Implementers: These are people who specialize in one SAP module or more, usually working for an implementing organization (unless they are freelancers). They work with people in the client organization during the implementation process (e.g. key users). When their job in one project ends, they move on to another client organization.

SAP programmers: These specialize in ABAP, the SAP programming language. They usually join a project after initial characterization of the project has been completed.

Training and education personal: These are experts in documentation and in training others to work with SAP. They are usually the last to join a project. At present John Bryce is the biggest company providing such services in Israel. Implementation companies may have their own training and education departments (e.g. NESS).

Client organizations These are the organizations interested in purchasing ERP software, as well as the services of an implementing organization. Management has to win the support and the aid of key users who represent workers in various organizational departments (e.g. HR, manufacturing, etc.) in order to achieve a successful implementation.

A Short History of the Israeli ERP Market

The literature search, a search of newspaper achieves coupled with interview data, provided the following general and short history of the ERP market in Israel. The market for organizational software in Israel, before the time of ERP, has emerged in the 1970s, gained popularity in the 1980s, flourished in the 1990s, and suffered a setback shortly after 2000 as a result of some disappointments by clients who experienced difficulties during the implementation process.

During the 1990s, various consulting firms identified the need for the creation of companies that could implement ERP systems, and they began specializing in this field. Eventually a company called NESS was created out of the consolidation of several consulting firms. Up to 2008 NESS was the only company in Israel allowed to sell SAP licenses, and still is a major implementer in the Israeli market.

In the past, three software manufacturers controlled the Israeli ERP market: *SAP, ORACLE*, and *BAAN*. The last has all but vanished, while SAP came to control the major portion of the Israeli market. In addition to manufacturing companies, other implementation organizations operated in the Israeli market which included:

New-Aplicom Founded around 1982, specializes today in implementing ORACLE, also represents "PeopleSoft" in Israel.

ORACLE representing its own product. ORACLE has also been chosen to implement its software in a number of big Israeli organizations: the ministry of defense, the air force, and the military in 2001, and Teva in 2002.

The first SAP ERP projects in Israel were implemented in 1995. These were implemented by TEKEM in Osem and Paz, followed by Merkavim in 1998, the MERKAVA project in 1998, Telrad (which replaced its BANN system) in 2003, and more recently, in 2004, the Electricity Company, the 100th SAP client in Israel. Other companies that have implemented SAP include Bezeq, Migdal insurance, the oil refineries, Mizrachi Bank, and more.

After this short history of the Israeli ERP market, the empirical section below will describe the nature and distribution of skills within an implementation team, and will explore what types of knowledge are utilize in the course of implementation work. Instead of following ready-made categories, I will try to map out below how main actors in the SAP ERP implementation field classify the types of knowledge and skills they employ in their daily work.

Findings

The Global Division of Labor and the Composition of Project Teams:

The implementation of ERP systems in Israeli organizations is nested within a global division of labor. The vast majority of client organizations in Israel contract with global implementation companies, which run national branches all over the world, while employing mainly project managers and a few top programmers in each branch. The project managers take an active role in contract negotiation with prospective clients, and after a contract has been signed, start to compose an implementation team. A top manager at the Israeli branch of "ERP International", a leading global implementation company, described the kind of people employed by his branch:

> Our people at ERP Israel have the relevant education. They are accountants, economists, engineering management graduates. These are not typical IT people, but rather people who understand business [the term said in English –A.D.]. [We employ- A.D.] purchasers, operation people who can talk to someone on an equal footing. It is very important in managing the implementation process. Understanding business is important, it is also important to have gray hair, or a bald head, so they will be treated accordingly. Most of our people are non-technical.

This excerpt points to a primary emic distinction, the separation of business and technical knowledge and skills. The global implementation firms employed only older more experienced people with a strong managerial background. After all, these employees will spend most of their time negotiating contract details with the clients' top managers. Following contract signing the project managers try to put together an implementation team which will operate for a year or longer until ERP implementation in the client's plant is complete.

Given the high level of required expertise associated with ERP implementation, composing a project team is not an easy task. The team managers, who are typically employees of a global implementation firm, start to subcontract with smaller and local firms employing ERP implementers and programmers. In addition, the project manager needs to hire freelance consultants, and, mainly in the early years of ERP implementation, global experts. A top manager working for a global ERP implementation company described the sub-contracting system as follows:

> No company has all the people it will need at all times. …so if I need more people I start to look around for them. As a result, you go to someone [a different implementation company] who did not take part in the tender or someone who lost the tender to you and you sign a contract with them about their implementers.

One can wonder why such a sub-contracting system takes place. Why did the global firm employ mainly project managers and not their own implementers? This study can offer two possible answers. The first has to do with the cyclical nature of the ERP market. Transactions in this market are very large in monetary terms, but spread out unevenly along the year. Thus, the global firms, exploiting their ability to sign the most lucrative contracts, transfer the risk associated with long term employment of experts in a highly volatile market to the smaller and local companies. This economic explanation is expressed in the following excerpt from an interview with an experienced implementer:

> This is a sector…with seasons, it all depends on the number of projects we get. You can hire a whole team and fire them when you no longer need them. But I employ only a certain core of people. When necessary I take sub-contractors. A company like "Local ERP" [a small local implementation company – A.D.] doesn't do projects, they sell heads. …That is what they do and it is good business, they make a profit from people. I also sell people on rare occasions.

This excerpt exemplifies the central role of sub contracting in the ERP sector, and how risk is forced down the business hierarchy. Also, note the use of the verb "sell" when talking about the sub-contracting of experts in this field. It is almost as if it is the expertise which is sold rather than the people who move around the market.

The second explanation for the sub-contracting system is related to the contextual nature of much of the knowledge employed by the implementers. Each and every project requires people who know the specific way in which a client organization conducts its work and structures their workflows. In addition, the implementers are required to intimately know the local business system in which the client organization operates. Thus, it is more cost effective to choose the right people for each of the implementation teams by sub-contracting with them rather than offering year long full employment to a very wide range of implementers, to cover all possible implementation projects. Given the combination of local yet highly specialized knowledge and skills required for good implementation work, putting together the right implementation team for a specific job, with all its diversity, is the single most important task of the project manager.

Interestingly, composing a project team is often done with the active agency of the clients. The failure rates of ERP exceeds 50%, and client organizations are well aware of the high risk associated with the implementation project. Partly as a result, some client organizations hire their own experts to guide them through the long and risky process of choosing the right ERP system, and to supervise the lengthy implementation process. Based on the professional advice of the experts they hire, it is not uncommon for client organizations to request that specific experts will be hired by the global implementation firm to become part of the project team. For example, in the case of a leading university in Israel, the client presented the global implementation company with a list of local experts, which they wanted to include in the implementation team. A few of the experts required by the

client had experience with previous ERP implementation in a different Israeli university. This is but one indication of how specialized skill and knowledge are within the ERP field, and how they are attached to specific people. Another example of the active role of clients in putting together an implementation team is from an interview with an experienced project manager:

> There is also horse trading. The teams which are offered by the implementation firms are screened very carefully by the clients. The client conducts detailed inquiries, holds interviews [with suggested project team members –A.D.]. They call previous clients, ask, a really careful screening. Clients also reject certain candidates. They ask: 'change this one, and, this one I'm ready to accept.' At the end the composition [of the project team- A.D.] presented to the client is meaningful, and the choice of the project manager is critical.

The elaborate screening mechanisms employed by the clients are surprising, but can be understood when both the high price of ERP implementation as well as the great impact of the software on central organizational processes are considered. Yet, this excerpt also demonstrates the existence of what Freidson (1970) calls 'imputed expertise', namely the ability of members of an occupational community [ERP implementers in this case] to ascribe varying levels of skills to various co-members.

ERP project teams are often global in terms of their human composition, and this was true particularly in the early days of ERP implementation in Israel. In the second half of the 1990's, integrator teams were composed of experts from all over the world. As one veteran implementer, who in time became a project manager, describes:

> Then, when it all [ERP] started it was a buzzword [said in English – A.D.]. No one knew how it was done. For example, when we did our first project in the Dead Sea, there were no people with experience so they weaved together in the project team an English-Irish expert [sic], and another English person with some experience, and a support person from South Africa, and a German to teach me. Everything was new in 1997. Today, ...we only bring in people according to a specific need, when we don't know a certain new module…The core already exists, there is a lot of knowledge here [in Israel –A.D.], so we bring fewer people from outside.

Based on this excerpt and other interviews, it emerges that in the early years of ERP the implementation teams were global. The basic technical skills and knowledge, such as knowing the different menus and adjustments required for implementation work were located outside of Israel. But within a few years this has changed, and the teams have become more local. In fact, from the early 21th century, Israel has started to export ERP specialists for projects in Europe and the USA. One of the implementers interviewed, described his own career around the year 2000, with the fear of Bug 2000 looming large:

> I took part in the first SAP ERP implementation in Israel, and then I left Israel and started traveling around, since there were so few people in the world with the knowledge of SAP. It was worthwhile and good to sell your knowledge. I first went to Taiwan. From there I was sent to Manila in the Philippines, then to Singapore. I worked in Paris, then back to Israel and England, and them Finland.

This impressive global market where implementation experts frequently move is an indication of the important role of contextual elements in implementation work. The knowledge and skills of the menus and workflows which are required for a successful implementation of SAP ERP is transferred not only by reading formal software documentation, but rather through the shared practice between global experts and local novices. Shared engagement in work practice, as the literature tells us (see Barley and Bechky, 1994), is particularly conducive to the transfer of contextual knowledge. It is interesting to note that even in the case of standard software which is very well documented, some elements of knowledge resist codification and require social engagement and shared practice in order to be transferred. While the terms formal and contextual knowledge provide initial tools to understand ERP work, we need to better understand the emic perceptions of skills and knowledge in ERP implementation. In the following section I describe how project managers, programmers and implementers classify the types of skills and knowledge utilized as part of ERP implementation**.**

Emic Perceptions of Types of Knowledge and Skills in ERP Work:

In the last section we note a basic separation between managerial and technical skills. While people with the former type of skill are directly employed by global implementation teams, the latter are sub-contracted to the project team through local implementation firms and directly in the case of freelance consultants. Yet, the separation between managerial and technical skills does not capture the complexity of implementation work. In fact, when we focus only on the work practice of implementers, the most significant distinction employed by the implementers to make sense of their daily work is between three types of knowledge and skills.

The first type is technical knowledge and skill, which denotes here not actual programming, but an intimate knowledge of the different menus offered by the software and the different workflows which are boxed in it. These computerized workflows are defined by SAP as 'best practice' in the various subject fields which the software covers.

The second type of knowledge and skills is called by my informants simply "content", which is comprised of: A) Extensive knowledge of and experience in a specific subject area such as accounting or HRM; B) An intimate knowledge of and experience in the local Israeli business system; and C) Work experience in the similar sector to the one of the client organization, which provides a better understanding of the existing work practices and the inner politics in the client organization.

The third type is interactive social skills, which, more generally, are most characteristic of the emerging techno-service sector. As the data presented below demonstrates, the interactive social skills required in ERP implementation work are divided by the implementers into three sub-sets: A) The ability to extract technical information from the client through social engagement; B) Persuasion skills; and C) The ability to construct professional trust with the client's key users. Below I demonstrate how this categorization of knowledge and skills is reflected in the interviews with my informants.

One of my informants, a veteran implementer, who is now a top manager at a global implementation firm, described the set of required skills in implementation work, and how the skill composition in Israeli project teams changed over the years:

> In the first wave [of SAP ERP implementation] which started in 1995-6, there were content people and they learned all the computer stuff. They hired accountants, engineers etc, and they trained us abroad, in a school near Brussels, Belgium. The course lasted about a month or a month and a half. Then we returned and worked in the field with people who came from abroad. In the second wave people came with a background of information systems and it was harder to train them.

This interview excerpt points to an emic separation between 'content" and 'computer stuff' in the work practice of implementers. Content denotes here a subject matter to which a specific software module belongs. For example, the HR module represents an attempt by SAP to standardize and then box knowledge and skills from the field Human Resource Management, and to present a large number of workflows as 'best practice'. 'Computer stuff ' here denotes not programming, which is hardly performed within implementation teams, but instead an intimate knowledge of the large variety of menus and computerized workflows offered by the software. Note that in the excerpt the speaker describes two periods in the development of implementation teams. During the first phase, content experts were hired and trained abroad in working with the software. These were people with rich experience in the various content fields and probably with strong social skills developed through their work experience. After their training in Belgium, they engaged in shared practice with experts outside of Israel. In the second stage of the development of project teams, formal education in information technologies took precedence over content, and the speaker sees that as a problem. The reason is that both the subject matter and the social skills required for a successful implementation are much harder to acquire when compared to IT education. The head of a medium sized and local implementation company expressed a similar view when commenting on the composition of a project teams: "The people I would hire, the ones I would like to have as implementers, are not those with a computer background, but with a background of processes. I prefer an accountant with a leaning towards computers than the other way around. "

An experienced ERP implementer, who came from an information systems background, described the two types of knowledge and skills she had to master in order to

become what she perceived as a good implementer: "At the beginning, I was a type of 'top user', I knew less about the way the organization itself worked, and more about the software. But slowly I learned how things work within the [client – A.D.] organization." Here, we see reference to a skill which allows for the understanding of the actual workflows and daily work practice in the client organization. In fact, learning to understand how specific client organizations constructed their workflows proved vital to the success of the implementation process as a whole. As we shall see, the ability to understand how the client works depends on the application of interactive social skills. The head of the implementation department in a small local company describes the type of a person he would like to hire as an implementer by saying "I want someone who knows how to extract the information. This is a quality that some people come with, but it can also be taught".

The interactive social skills had other important roles in implementation work. While ERP implementers were not required to know how to write code, they were required to master both the subject matter and the different menus representing 'best practice' which were offered by the software. This is reflected in the following quote from an interview with an experienced implementer:

> With ERP the kind of people and skills are different. With regular systems [the previous generations of organizational software – A.D.], one needs to read a normal workflow, and capture it within the computer system. This is done by programmers, system analysts etc. …ERP is totally different. It is like medicine, you have a basket of solutions designed by the software producer, and it applies to a collection of workflows which were defined as best practice. There are 100 types of purchasing processes, for example, designed with some built in flexibility. The implementer needs to understand the problem of the client… and to chose out of the collections of workflows something which will fit the client. The type of people needed for this task…are people who know more than computing, who know the system's capabilities and how to tailor a solution to a specific problem. You need knowledge and experience in workflows.

This excerpt is more focused on the work of implementers, and the speaker once again makes a distinction between computing [relating here to in-depth knowledge of the different menus and not to active programming], and practical experience in the relevant field, such as accounting or HR]. But, in addition the speaker relates to the implementers need to "…tailor a solution to a specific problem." Here, the use of medicine as a reference point is powerful since it cuts right to the heart of the problem facing ERP implementers. Implementers perform an act of diagnosis of the client organization, and, like a physician, in order to diagnose they need to extract vital information from the clients' employees. This knowledge, just as in the case of medicine, is highly contextual and local in nature. The real challenge facing the implementer is to understand the "problem", which in reality is the previous workflow in the client organization, in order to customize the SAP ERP menus to fit the specific needs of the client. This aspect of implementation work can be described as

translation: understanding the meaning of local and often chaotic realities of work in the client organization, and transforming them into more structured workflows which could be then re-structured according to an existing and boxed workflow within the software. As studies within Science and Technology Studies teach us (Law and Hassard, 1999), translation involves the application of power and the balancing of social interests. The implementers employ their brokering position between the client and the software and while translating actual work realities into software capabilities, actually convinced the key users in the software superiority. Interestingly, ERP implementers talk about the SAP language and logic and their need to convince the key users to adopt this language and logic.

To perform their important role as translators, the implementer had to master a set of service and social skills which allowed them to extract the vital knowledge and knowhow from key users in the client organization. Importantly, the aim of extracting local information about workflows and administrative logic of the client organization is not to adjust the software to the client's needs but instead to adjust the client to the capabilities of the organizational software.

An important function of the implementers, I claim, is to perform what I will call 'reverse customization'. Customization, by definition, is the adaptation of a product to the specific needs of a client. Here, the emphasis in on the producers' willingness to re-design their product according the client specifications. While the producers and implementers of ERP SAP system maintain that their software is adaptive and highly flexible, they mean within the readymade menus and workflows defined as 'best practice'. In reality they hardly modified any of the menus or workflows boxed within the software. The efforts to convince the potential buyers that SAP ERP encapsulates the most up-to-date work procedures within a wide range of subject areas begins in special promotional events which take place in hotel lobbies even before contract negotiations. But most of the reverse customization is built into the frequent social interaction between the implementer of a specific module and the key user appointed by the client organization. Extraction of vital information from the key user and the act of persuasion of software superiority are intertwined.

Reverse customization requires the implementers to do more than simply learn the ways of the client organization. A major role they play is in convincing the key users to think within the envelope, broad and flexible as it may be, offered by the ERP software. This means that as part of the social and service skill they need to master the art of persuasion. To be convincing the implementers need to present themselves to the clients' key users as experts in their field, to demonstrate an excellent understanding of the existing workflow in the client organizations, to have a very good command of the software, and to be able to persuade the key users that the software solution in indeed superior to the previous way of conducting business. All these skills are intertwined in practice. For example, the presentation of the software options and the effort to convince the client are done simultaneously as part of the interaction between the implementer and the key user. Here is a short quote from an interview with a key user in the HR department of an Israeli university, who was convinced to adapt the SAP way of thinking:

> During the first stage I'm supposed, in HR for example, to know all the
> work in our [the client organization] department and who one should
> speak with [when encountering a problem]. I need to know what other
> departments are connected to the HR department, what applications
> they might have, and I need to provide this information to the
> implementation company. I need to provide them with the broad picture.
> When we start working with the software, I need to understand how it
> works and to start thinking more in the 'SAP way.'

This interview excerpt provides an indication that the implementers were successful in convincing the key user, who later is responsible to disseminate the SAP knowledge among the other employees in the client's HR department, that she will need to think the 'SAP way'. In reality this means that the users are required to adopt themselves to the software capabilities rather than the other way around.

To sum up, in this paper I identify three important types of skills which the implementers see as central to their work: technical, content and interactive social skills. Implementers and their managers have a developed vocabulary for the required technical skills, and also detailed descriptions of how these skills are learned and transferred. This is also true for the so called 'content' skills, namely an experience in a specific subject matter acquired prior to their employment as implementers through professional training and practice in field such as engineering and accounting. Yet all those involved in ERP implementation find it much harder to discuss the interactional skills which they employ while extracting vital information from key users, convincing them of the superiority of their product, and presenting themselves as experts in their field. Some of the informants describe these skills as qualities that a person either has or doesn't have. Others said that these interactive skills could be learned, but failed to specify how. The difficulty in discussing the required interactional skills is also related to the traditional cultural separation between knowledge and service work which I highlighted at the beginning of this paper. In the daily work practice of the ERP implementers, service and the technical elements are combined as part of social interactions, and together they comprise a distinct set of skills different from the some of their parts. In the discussion section below I discuss some of the implications of the blending together of knowledge and service elements in the work of ERP implementers, seen here as an example of an emerging class of techno-service workers.

Discussion and Conclusions

Our age is an age of rapid digitalization of the socio-economic infrastructure. The computerization of work and leisure blurs the traditional divisions of labor among design, production and sales. Product development and design adjustments are increasingly becoming part of sales and service work. The changing division of labor has important ramifications on the types of skills and knowledge necessary in different lines of work. This paper challenges the traditional separation between knowledge and service work.

One impact of digitalization is the flow of technical experts from the R&D labs and into the service and sales functions, where they customize innovative products according to clients' needs (Darr, 2006). In the case of ERP, we see the central role of expert knowledge in the implementation teams, as 'content' experts engage in 'reverse customization'. As the technical complexity of sales and service increases, I argue, so does the need of so called 'knowledge workers' to depend on interactive social skills. The growing interdependency of social and technical skills is rooted in a shift in advanced economies from sales of a product to sales of a process, and carries important implications for cultural categories, work organization and educational programs. While the separation between knowledge and service work is fundamental to our society, in the daily work of ERP implementers this analytic separation is all but meaningless. As part of technical service and technical sales work, it is becoming impossible to differentiate the two types of skills.

Governments and economic institutions have long tried to measure and quantify types of skills and the complexity of different lines of work. The analytical distinction between technical and social skills underpins some of these attempts. For example, much of the sociological research on the skill levels of different jobs, which is based on the American *Dictionary of Occupational Titles* (DOT), combines three main dimensions: complexity in dealing with things, with people, and with data, to create an overall measure of job complexity (Attewell, 1990: 426). Technical skills are associated mainly with the manipulation of things, while social skills are related mostly to the complexity of dealing with people. This basic separation is challenged by the rise of techno-service workers, and might point to a need to re-evaluate the way we classify and quantify our contemporary world of work.

What exactly does the growing inter-dependency of knowledge [or technical] work and service [or sales] work mean? On one level, it means that the service elements and the technical elements of ERP work are not separated in temporal terms, but are instead performed simultaneously. The interactive social skills employed by ERP implementers include the development of what Pacey (1990:146-7) calls a "technological dialogue" with the key users. The creation of such dialogue requires building rapport and professional trust, as well as the interactive exchange of technical, political and social information. The ERP implementers also conduct technological interviews with the key users, in order to extract vital information from them. Here, knowledge and service work are intertwined in temporal terms.

The blurring of boundaries between knowledge and service in the techno-service sector is, in a deeper sense, an indication of the growing penetration of professional work into the heart of the industrial enterprise. The separation of knowledge and service work has historically been supported by work organizations, through the creation of separate departments and a clear division of labor between knowledge and service workers. Yet, this distinction between knowledge and service work has never existed within the professions. In medicine, law and accountancy, this distinction carries little meaning, and professionals will find it very difficult to separate the knowledge and service aspects of their work.

As professionals enter sales and service positions, they carry with them the blending of these two types of skills, which is part and parcel of their long professional socialization. Since organizations, unlike the professions, think with categories which better fit the logic of the industrial era, they find it hard to conceptualise the skills employed by techno-service workers, and to tailor effective training programs for them.

One practical implication of this study is that the enhancement of the *interactive socio-technical skills* of the ERP implementers could greatly improve their chances of success. Formal training which effectively combines technical and service skills is neglected today. Good communication skills could improve knowledge and skill transfer within project team, and between the teams and the key users. ERP Implementers should learn how to manage a *technological interview*, specifically structured to extract vital technological information about the client's organizations. Formal and informal training which require students to confront the growing interdependencies between social and technical skills will support an emphasis on value-added processes and will improve the competitiveness of enterprises in the emerging techno-service sector.

References

Atttewell, Paul
1990   "What Is Skill?" *Work and Occupations*, 17: 422-448.

Autor, David H., Katz, Lawrence F., and Kearney, Melissa
2006   "The Polarization of the U.S. Labor Market." *NBER Working Paper* (January 2006).

Barker, James R.
1993   Tightening the Iron Cage: Concertive Control in Self-Managing Teams
        Administrative Science Quarterly 38: 408-437.

Barley, Stephen, R.
2005   "What Sociologists Know (and Mostly Don't know) about Technical Work". In S. Ackroyd, R. Batt, P. Thompson and P. Tolbert (Eds.), *Handbook of Work and Organization*, pp. 376-403. Oxford: Oxford University Press.

Barley, Stephen, R., and Bechky, Beth A.
1994   In the Backrooms of Science: The Work of Technicians in Science Labs. *Work and Occupations* 21: 85-126.

Barley, Stephen R. and Orr, Julian
1997   Introduction: The Neglected Workforce. In S.R. Barley and J. Orr (Eds.), *Between Craft and Science: Technical Work in U.S. Settings*. Ithaca and London: Cornell University Press.

Barley, Stephen R. and Kunda, Gideon
2004   *Gurus, Hired Guns, and Warm Bodies: Itinerant Experts in a Knowledge Economy*.
         Princeton and Oxford: Princeton University Press.

Barrett, Rowena
2004   "Working at Webboyz: An Analysis of Control over the Software Development
         Labour Process." *Work, Employment and Society* 38(4): 777-94.

Bechky, Beth A.
2003   "Sharing Meaning Across Occupational Communities: The Transformation of
         Understanding on a Production Floor." *Organization Science*, 14, 3: 312-330.

Bell, Daniel
1979   The New Class: A Muddled Concept. *Society* 17: 15-23.

Blair, Tony
1998   *The Third Way*. London: Fabian Society.

Brint, Steven
1984   "'New-Class' and Cumulative Trend Explanations of the Liberal Political Attitudes
         of Professionals." *American Journal of Sociology* 90(1): 30-71.

Castells, Manuel
1996   *The Rise of the Network Society*. Oxford: Blackwell.

Castells, Manuel and Aoyama, Yuko
1994   "Paths towards the Informational Society: Employment Structure in G-7
         Countries." *International Labor Review* 133(1): 5-33.

Darr, Asaf
2004   "Social Skills in Technical Sales Work". In Warhurst, Keep andGrugulis (eds.) *The
         Skills that Matter*. New York: Palgrave.

2006   *Selling Technology: The Changing Shape of Sales in an Information Economy*. Ithaca: Cornell
         University Press.

Darr, Asaf and Warhurst, Chris
2007   "Assumptions, Assertions and the Need for Evidence: Debugging Debates about
         Knowledge Workers." Forthcoming in *Current Sociology*.

Department for Trade and Industry (DTI)
1998   *Our Competitive Future*. London: HMSO.

Europea Communitie (EC)
2004   Facing the Challenge. Luxembourg: Office for Official Publications of the
          European Communities.

Goodwin, Charles
1994   "Professional Vision." *American Anthropologist*, 96, 3: 606-633.

Hecker, Daniel E.
2005   "Occupational Employment Projections to 2014." *Monthly Labor Review*, November:
          70-101.

Lave, Jean and Wenger, Etienne
1991   *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University
          Press.

Law, John and Hassard, John
1999   *Actor Network Theory and After*. Oxford: Balckwell.

Mills, Wright C.
1951   *White Collar*. Oxford: Oxford University Press.

National Academy of Engineering
2005   *Educating the Engineer of 2020: Adapting Engineering Education to the New Century*.
          Washington, DC: The National Academies Press.

2004   The Engineer of 2020: Visions of *Engineering* in the New Century. Washington,
          DC: The National Academies Press.

OECD
1994   *Jobs Study: Evidence and Explanations*. Paris: OECD.

2001   *Science, Technology and Industry Scoreboard: Towards a Knowledge-based Economy*. Paris:

Orr, Julian E.
1990   Sharing Knowledge, Celebrating Identity: Community Memory in a Service Culture.
          In David Middleton and Derek Edwards (Eds.), *Collective Remembering*, pp. 169-189.
          London: Sage.

1996   *Talking About Machines: An Ethnography of a Modern Job*. Ithaca and London: Cornell
          University Press.

Reich, Robert

1993   *The Work of Nations*. London: Simon & Schuster.

Spenner, Kenneth, I.
1991   "Skill: Meaning, Methods, and Measure." *Work and Occupations*, 17:399-421.

Suchman, Lucy, Blomberg, Jeanette, Orr Julian E. and Trigg, Randall
1999   "Reconstructing Technologies as Social Practice." *The American Behavioral* Scientist, 43, 3: 392-408.

U.S. Department of Labor, Bureau of Labor Statistics
1985   *Occupational Employment in Manufacturing Industries*. Washington, DC: U.S. Government Printing Office.

1988   *Occupational Employment in Manufacturing Industries*. Washington, DC: U.S. Government Printing Office.

1991   *Occupational Employment in Manufacturing Industries*. Washington, DC: U.S. Government Printing Office.

Van Maanen, John, and Barley, Stephen R.
1984   Occupational Communities: Culture and Control in Organizations. *Research in Organizational Behavior*, 6: 287-365.

Wuthnow , Robert. and Shrum, Wesley
1983   "Knowledge Workers as a New Class: Structural and Ideological Convergence among Professional-Technical Workers and Managers." *Work and Occupations*, 10:4

Now You See It and Now You Don't: Consequences of Veiling Relational Work

LISA KREEGER
IBM, Almaden Services Research

ELIZABETH HOLLOWAY
Antioch University, Leadership and Change

This paper offers findings from a study of relationship formation in Information Technology (I.T.) outsourcing services and explores the conditions in which relational practices are veiled by the work designs, tools, business lingo, and even media representations of Information Technology outsourcing services. Veiling describes the way the language and focus of these elements have taken over and permeated organizations to levels where the aspects of relational work are obscured. As a result, relational skills are delegitimized, work is slowed down, conflict results from incorrect assumptions, and inefficient technology is tolerated. We identify intended and unintended consequences, on individuals and organizations, of relational veiling as a strategy that emerges in response to the everyday realities of the workplace.

INTRODUCTION

Outsourcing service providers must deliver apparently seamless service to their clients while they concurrently navigate the complex conditions of their own organizations. As with a play-within-a-play, this work goes on primarily behind the scenes. The individuals and groups charged with shaping and delivering outsourcing services are thrust into work situations that bridge hierarchical boundaries, are geographically distributed, and pose high professional and monetary risks. Schedules are fully booked with face-to-face meetings, electronic correspondence, and telephone conference calls typically extending well beyond a traditional work day as people work together across multiple time zones. The standard routines of the business (eg: project management protocols, schedules, formalized meeting agendas, sales pipeline reviews, managing sales support software) contribute to a structure that gives shape to the turbulence of daily demands. These formalized work processes, protocols, and business controls are clearly visible in the rhythm of daily work. However it is the intangible work of business relationships that is the glue holding the seams of seamless service together.

This paper offers findings from a study of Information Technology (I.T.) outsourcing services and explores the conditions in which relational practices are veiled by the work designs, tools, business lingo, , and even media representations of Information Technology outsourcing services. Veiling describes the way the language and focus of these elements have taken over and permeated organizations to levels where the business benefits of relational work are obscured. Specifically, this paper describes the intended and unintended consequences, on individuals and organizations, of relational veiling that emerges in response to the situational dynamics of the I.T. outsourcing services workplace. The term

'veiling' was assigned by our research team as an etic code to describe the situation where people "don't say". Instead they avoid conflict without resolving it, fail to clarify assumptions, vent issues and feelings in back channels to avoid difficult conversations, choose to interact indirectly via electronic media to avoid direct and potentially difficult contact, and persist in the use of technology tools that do not help accomplish work. We contend that the language of spread sheets and project management are privileged over relational work. As a result, the everyday realities of person-to-person and person-to-technology relations are obscured. The critical work of relationship is veiled by this dominant perspective and mirrored by a silence in the empirical literature.

BACKGROUND AND APPROACH

The idea for this study initially grew out of varied consulting engagements with technology outsourcing service providers from 2001 through 2005. Executives would often say, "I don't have to talk about this relationship stuff. I'm great at getting along with people." Their focus was on managing the relationship rather than understanding the work that was required to create and nurture the relationship. Relationship work lands in the realm of "soft skills" and therefore did not seem worthy of the attention of "real" business; the intangibility seemed to make the topic uncomfortable. This was reminiscent of the disappearing of relational skills described by Fletcher (1999) in her study of female engineers: "The discourse suggests that there is a dynamic process involved in which relationship practice "gets disappeared" as work and gets constructed as something other than work" (Fletcher, 1999, p. 103). However, our observation is that relational work was not invisible in Outsourcing Services. Instead it appeared to shift in and out of preeminence depending on the proximity to contact with the external Client. The work of relationships was stressed and highlighted, greatly visible, when it came to the relationship with the external client. For example, significant annual corporate investments of both time and money were focused on managing the business relationships between the customer and the service provider and the business value of relationship was frequently spoken of in conversation as central to revenue growth and client satisfaction. In contrast, the 'in house' or intra-organizational relationships did not receive the same degree of attention despite broad recognition that internal breakdowns, quite distal from the Client interface, were visible and damaging to the overall Client relationship. We were intrigued by this contrast in attention to relationship and drawn to research it in more depth.

The findings described in this paper are drawn from a grounded theory study of outsourcing relationship formation (Kreeger, 2007). During 2006-2007 we completed 25 in-depth, unstructured interviews with technology outsourcing services professionals from a Fortune 50 global technology organization. All of the participants were actively involved in newly signed outsourcing agreements that represented three different service sectors: industrial, manufacturing, and travel. There was extensive field work as our research team had open access to face-to-face meetings, telephone calls, team rooms, and documents (e.g.,

job descriptions, process documents, metrics, and measurement policies) related to the work of outsourcing service delivery.

We applied the analytic processes and tools of dimensional analysis (Bowers, 1988; Kools (1996), Schatzman, 1991; Schatzman & Strauss, 1973) and situational analysis (Clarke, 2005). Star (1991)describes this approach to constructivist grounded theory as an approach to study predominantly invisible social arenas. Veiling emerged as a significant dimension of the overall dimensional analysis.

ICONIC IMAGES

The iconic image of the technology outsourcer is not about relational work. The media commercials of three major outsourcers, Accenture, EDS, and IBM, depict an interesting picture and support this claim.

EDS is a large outsourcing provider. In an EDS commercial called Manhattan (metroid48), a group of people are recruited off the street with the promise of $100.00 for 15 minutes of work. These people are the outsourcing team. One of them is in a chicken suit. The implication is that the work of outsourcing is being accomplished by a group of unskilled strangers. Perhaps EDS intends this as an observation about their competitors.

A recent television spot for IBM, another larger outsourcing service provider, opens with the view of a large factory. As the camera closes in on the factory, we see IBM-blue flowers streaming from the smokestack. "I'm Not Like Everybody Else," by the Kinks plays in the background. The flowers blow into an office building where people are working in cubicles. The people in the cubicles are lip-synching to the lyrics from the Kinks. Finally, against a long shot of Manhattan and the Empire State Building, we see the IBM logo (IBM, 2007). The blue flowers all look alike and the people are in cubicles lip-synching. What about them was not like everybody else? In an IBM television commercial, a group of people are standing together in a semi-circle. It appears that they might be in an airport. Their mobile devices all ring. They talk and text into their mobile devices. They exchange cryptic monosyllables. We think about face-to-face meetings where people mostly interacted with their machines.

Another large outsourcing provider, Accenture, has Tiger Woods as their brand endorser. Most of the commercials show him making impossible shots using skills that are compared to skills that Accenture can help companies build through outsourcing: "We know what it takes to be a Tiger" (David, 2006). Tiger Woods is presented as an icon of high performance. Tiger Woods is just one person and golf is a solo sport. Where is the relational work in this image? Absent. We learn from this Accenture message that great outsourcing providers are solo artists.

It is difficult to miss these iconic messages once you begin listening for them. They depict people acting alone or interacting with machines instead of each other. This area of media discourse and its relation to the way that relationship is veiled within organizations is, in and of itself, a fascinating topic for research. It became a part of this study as we discovered that the language and work of relationship was veiled in acronyms and project management processes. It was constituted by the stories people chose to share and the work we observed. These branding forces are a part of what keeps relational discourse silenced.

VEILING CONDITIONS AND STRATEGIES

Veiling is a strategy that individuals and groups take as a result of particular aspects, or conditions, of the total work context. In this section of the paper we briefly describe three conditions that consistently linked to veiling as a strategy. These conditions include (1) Work designs (2) Business Metrics and Quotas, and (3) Technology Tools Understanding these conditions, and the organizational change levers that they represent, is an important part of the contextual story of relational work.

The participants in this study had a lot to say to our research team about relationships in outsourcing services. They had strong opinions about relationship value (positive), what worked and didn't work in their work with people and technologies, what they'd change and how they'd improve it. In contrast, when the participants were together, on the phone or in person, they didn't talk about these same observations and concerns. Instead, they discussed the problems with technical work and reviewed project management status. They seldom discussed successful or "on-target" work. The only time the word "relationship" was used was in context with the word client (e.g., "I am focused on the client relationship")

Work Designs
The structures and processes of organizations are sites of focus and frequent change geared to optimize service and reduce costs. The matrixed structure of the overall organization, the duration of group participation, and the lack of face-to-face interactions were realities that inadvertently supported the veiling of relational work.

The matrix organization – The study participants describe their organizational structure as a matrix. A matrixed organizational structure is one in which individuals and groups typically have accountability related to more than one department in the firm and are required to coordinate horizontally and vertically through the organization with limited to no formal authority. The matrix reporting structures were identified as a barrier to relational work.

> "The strange thing about the matrix is that I am kind of the manager, but then [the people] have another people manager. And so, you know, you have the first couple of conversations; if it's not working out, then I have to go talk to [another manager instead of the person]. I hate doing that. I think that we should all just be professional and kind of work it out. But you have to do it. "

The design of business targets and quotas was also a particularly challenging condition for relational work as each part of the organizational matrix establishes distinct business targets and quotas. We learned that these are typically established hierarchically above and away from the point of external Client contact although their attainment is linked to individual compensation, career growth, and job retention. Additionally, we learned that measurements and targets change frequently, often more than once each year, and are not the same across different delivery units in the organization. In some cases the targets pitted one part of the outsourcing organization against the other.

> "I'm trying to build this relationship with this other team to try and improve all of this and, you know, our goals aren't the same. My-, mine's-, you know, their goal is just to sign-, get the deal signed and all that other stuff can happen later. And I'm saying, hey, I'm-, you're causing me a lot of trouble on the backside by not getting this, here, put it in your plan. So I, I'm sure it conflicts with-, with their goals and, um, you know, that doesn't help."

People were not measured on their ability to facilitate, communicate, listen, or respond.

Group tenure – The Outsourcing service assignments vary in length depending on an individuals focus area. The earliest periods of outsourcing service delivery are cast with short-term and non-repeating work groups. Group members do not expect to be assigned with the same individuals again. The services professionals that expect to be short term and non-repeating are less focused on forming relationship.

> "I did task management as a project manager and I didn't care about the relationship. I'm like, dude, just get the job done and get out of here. I don't have time because this is a short schedule."

More senior executive members anticipate greater long term accountability to their Client and speak about their role in more relational terms.

> "At a very high level, the company is holding me responsible for the customer relationship. So I've always taken the customer call- [that] says that they want one throat to choke. And my throat is the one that gets choked. So from the company standpoint, I would also say that I am the one throat to choke."

Face-to-face interaction – The various groups that and individuals who participated in this study lived in different parts of the United States. The Service Teams that participated in the study all had a face-to-face meeting to kick off their work. This is a rarity as travel costs are often the first to be cut. Each 'deal' is responsible for staying within a total budget and the travel expenses associated with face-to-face meetings come out of a contract's total budgeted expense amount rather than from any centralized pool of funds. Executive leaders will avoid

even a small relative percentage of discretionary expense to save budget for unpredicted, but expected, technical and operational cost overages.

The participants were clear about the impact of some face-to-face interaction on the ability to build and maintain relationships.

> "It would be so nice if [the Firm] actually went back to people showing up in the office, working as a team and running pieces of business because then you would know the people. You could see them, you could talk to them, you could be much more productive and coordinated. I would say that is the biggest obstacle I see in [the Firm] to relationships in general is that I sit in my house. I don't even see people."

In addition to increased productivity and team coordination, an initial face-to-face meeting was linked with improved flexibility and responsiveness.

> "If you get along with someone when you meet face-to-face and you start talking to them, you kind of get to know each other on a more personal level. So then after we come home and we work [on the phone], we have a better idea how the other person thinks, what their perspective is and what approach we're talking about. It's easier to share and be open with issues. "

> "It's just different when you've met somebody in person to when you've meet them on the phone … my thought is always that it's much more difficult to be an ass to somebody after they've met you."

Technology

Technological holds a featured role in the work of Outsourcing Service groups and study participants joked that their most important relationship was with their laptop PC. We found the use of team rooms to veil the realities of project complexity and break down. We also observed how powerless participants were over the design, implementation, and requirements for technology use and how unhelpful tools were promulgated as a result of users veiling their perceptions of the tools.

Project Team Rooms – The uses of Project Team Rooms provide an example of a virtual location where relationships occurred and were played out, in some cases superseding any other locale.

> "The Project Team Room is the main repository. We tell the team that if it's not in there, it doesn't exist. All right? So if you don't have an issue in there, don't call me up and tell me you have an issue unless I can go in there and see it. So we make sure they put issues in there if they want help resolving those. "

Team rooms create virtual locations where members of outsourcing sales and delivery teams go to understand the progress of their work. It is from inside Team Room spaces that they report and signal to one another that something is going wrong. Projects are assigned to red (at risk or troubled), yellow (under watch), or green (on track) status. In contrast, there are no status dimensions that represent the relational health or functioning of the group; a project can be at green status in the midst of tremendous conflict and crisis. In this way, the Project Team Room becomes a space where relational conditions are veiled.

Roll-out and utility

Outsourcing Service account teams are mandated by the broader organization to use certain technology tools regardless of their perceived utility by team members. Participants reported having to use multiple tools for the same purpose because such use was required by different parts of the matrix organization. In this example a study participant voices frustration technology.

> "[You should call it] disabled by technology, I think the ability to route stuff and add approvers and everything, in some ways really complicates things. It's tough doing things here. It really is. And simple things … it shouldn't require the complexity that they have.

Veiling is manifested in this example when the individual and group persisted in the use of the disabling technology without giving visibility to their concerns.

Implications

The unintended consequences of relational veiling can have negative impact on service delivery. When veiling is opaque, individuals and groups may appear to take actions counter to effective business practices and natural courtesy. The unintended consequences of these actions are service breakdowns, losses in productivity, and visible 'seams' in the service performance that erode client confidence and satisfaction. In other instances, when veiling is more diaphanous, there is a mis-match between what people say about relationship value and how they do their work. Service professionals describe that "relationship is everything," while the everyday realities of person-to-person and person-to-technology relations are concealed by a focus on project management language and technology.

One executive told us: "My job is to make it smooth". Work appears smoother behind the veils of various thicknesses that work their way into the toolkit of service delivery. In that sense, veiling is an adaptive response to the work context that leads to an intended result. Veiling strategies are taken for self preservation and for protection of individual and group.

So where should we go from here? What advice can we give Outsourcing Services professionals? Unfortunately and not very pragmatically, the answers that we propose are likely to require both time and financial investment.

First, we recommend that organizations take a close look at the work design and process burdens that they are placing on their people. The conditions of the work place form barriers both to people's efforts to work with other people as well with people's efforts to work with technology. Second, we recommend an increased intentionality to new technology roll-out. Innovation and transformation is a major element in technology services. However, incautious implementation ultimately damages the overall service experience. Lastly, we recommend consistent financial investment in some face-to-face interaction for outsourcing service groups. We calculated that the cost of an initial face-to-face meeting was seldom more than 1% of the project budget.

There is certainly a rich opportunity for more research for those of us in business ethnography. This study only begins to scratch the surface of a major gap in the empirical literature (Kreeger, 2007). We are uniquely positioned to watch for the work that relationships do and to recommend changes in practice and technology that have the potential to both add to our scientific understanding of a predominately invisible phenomenon as well as to make recommendations with business impact.

Conclusion

Given the challenging conditions described in this paper, and the overall turbulence of the I.T. services environment, it is no wonder that individuals consciously or unconsciously take on veiling strategies. We stress the critical point that relational work is not veiled simply because people lack some form of interpersonal skills or desire to get along with others. Instead, relational work is veiled within the dominating conditions of the workplace. It is also not our intention to vilify the importance of enabling technology and business controls. Instead, we are suggesting that these have been over executed at the loss of other important dimensions of work.

References:

Bowers, B. J.
1988   Grounded theory. In B. Sarter. *Paths to knowledge innovative research methods for nursing.* New York, N Y: National League For Nursing, 33-59.

Clarke, A. E.
2005   *Situational Analysis: Grounded theory after the postmodern turn.* Thousand Oaks, California: Sage.

David
2006   Accenture: Right tiger, wrong medium. Retrieved April 27, 2007, from http://www.thirdwayblog.com/category/accenture/

Fletcher, J. K.

1999   *Disappearing acts*. Cambridge: The MIT Press.

IBM
2007   Anthem. Retrieved 2007, April 28, from http://www-03.ibm.com/innovation/us/advertising/advert_helpdesk.shtml

Kools, S., McCarthy, M., Durham, R., & Robrecht, L.
1996   Dimensional analysis: Broadening the conception of grounded theory. *Qualitative Health Research*, 6(3), 312-330.

Kreeger, L.D.
2007   *Inside outsourcing: A grounded theory of relationship formation within a nascent service system.* (Doctoral dissertation, Antioch University), Dissertation abstracts international, AAT 3285363

metroid48. Manhattan EDS series. Retrieved April 28, 2007, from http://youtube.com/watch?v=QUtwlMTYajM

Schatzman, L.
1991   Dimensional analysis: Notes on an alternative approach to the grounding of theory in qualitative research. In D. R. Maines (Ed.), *Social organization and social process: Essays in honor of Anselm Strauss*. New York: Aldine De Gruyter.

Schatzman, L., & Strauss, A.
1973   *Field research strategies for a natural society*. New York, N.Y.: Prentice Hall.

Star, S. L.
1991   The sociology of the invisible: The primacy of work in the writings of Anselm Strauss. In D. R. Maines (Ed.), *Social organization and social process: Essays in honor of Anselm Strauss*. New York: Aldine De Gruyter.

The Invisible Work of Being a Patient and Implications for Health Care: "[the doctor is] my business partner in the most important business in my life, staying alive."

KENTON T. UNRUH
Division of Biomedical and Health Informatics, University of Washington

WANDA PRATT
Information School & Division of Biomedical and Health Informatics, University of Washington

In a distributed system of care, patients shuffle among many clinicians and spend the majority of their time away from the treatment center. Although we see the results of patients' work (e.g., medication taken, arrived at appointment) we do not see the work itself. By failing to see this work, industry overlooks issues with vital implications for their business. To lift the veil of invisibility from patients' work, we conducted a longitudinal field study to uncover the invisible work breast cancer patients do to obtain information, bridge inter-institutional care, manage dependencies and resolve inconsistent recommendations. In this paper we provide detailed examples of this work and explore the impact on patients and health-care operations; identify patterns of work with implications for patient-centered research and design; and propose common information spaces to improve patients' work through designs that highlight dependencies, preserve state information, link recommendations to justifications, and track task progress.

Motivation: Why Study Patient Work?

In a distributed system of outpatient care, patients shuffle among many clinicians and spend the majority of their time away from the treatment center. Although we see the results of patients' work (e.g., medication taken, arrived at appointment), we do not see the work itself. Consequently, patients do what Star and Strauss call background work: a type of invisible work where "the workers themselves are quite visible, yet the work they perform is invisible or relegated to a background of expectation (1999:15)."

By failing to "see" the invisible—yet essential—work that patients do when undergoing care, the health-care industry struggles to answer key questions with vital implications for their business:

- How to increase patient participation? Despite evidence that people who participate in their care achieve better health outcomes (Laine and Davidoff 1996), research suggest that many patients do not achieve their preferred level of involvement in their own care (Degner and others 1997).
- How to improve information provision? Patients require accurate and timely information to participate effectively in their care. However, patients continue to express unmet information needs (Boberg and others 2003; Kravitz and others 2002) that inhibit their ability to proactively manage their health care.

- How to reduce medical errors? Although researchers call for inclusive approaches to reducing medical errors that include input from all stakeholders (Kohn and others 2000; Unruh and Pratt 2007), patients' knowledge of their personal health situation (e.g., evolving needs, extenuating circumstances) remain largely untapped in error-reduction strategies.
- How to leverage information technology? Despite projected benefits of information technology in health-care organizations, adoption rates of clinically-oriented information systems—from electronic medical records to online personal health records—remain low (Burt and others 2005) (Tang and others 2006).

Despite their central role in answering these questions and addressing these challenges, patients remain understudied actors in health-care. Without knowledge of the work patients actually do in the socio-technical system of health-care, any evaluation is incomplete and organizational improvement will suffer. Of particular importance is patients' 'invisible work.' We define patients' invisible work as the portion of their effort that remains hidden because it occurs behind the scenes (e.g., performed at home), between clinical encounters (e.g., scheduling, trouble-shooting side effects), or amidst multiple distributed actors (e.g., communicating with people in multiple roles or multiple people within a role). Although patients' invisible work is spawned by clinical care concerns, this work is rarely acknowledged—much less supported—by existing information systems or organizational processes designed to support the work of clinicians at the treatment center.

Methods: Lifting the veil of patients' invisible work

Making work visible requires careful study of the invisible work being studied (Suchman, 1995). Unlike other patient-centered research, we could not study patients in a single location (e.g., the treatment center) or clinical encounter (e.g., consultation or treatment session) because we sought to characterize patients' work in a holistic sense as patients undergo outpatient cancer care. Thus, we targeted patients' work that remained at least partially concealed because it occurs away from the treatment center or dispersed across clinical interactions.

To lift the veil of invisibility from patients' work, we conducted a 3-part field study of cancer patients' in-situ work while undergoing outpatient cancer care. In Part 1, we conducted in-depth interviews with 18 cancer patients; 16/18 were actively receiving cancer care; 8/18 were undergoing chemotherapy. In Part 2, we conducted demographic surveys and in-depth interviews with 8 breast cancer patients. Then, we followed these patients for 12 weeks during active treatment, conducting 76 critical incident interviews to understand their work as it unfolded over time. In Part 3, we conducted demographic surveys, in-depth interviews, personal health information collection reviews, and photo diaries with 9 breast cancer patients. Then, we followed these patients for 12 weeks during active treatment conducting 151 critical incident interviews. To supplement this data, patients kept logs of their information interactions and constructed a photo-diary of their experiences. In sum, we studied 35 cancer patients conducting a total of 35 in-depth interviews, 17 demographic

surveys, 227 critical incident interviews, 9 personal health information collection reviews, and collected over 200 photos from patients' photo diaries.

Findings: Patients' Invisible Work and Why It Matters

Patients' invisible work is difficult to grasp in the abstract. Therefore, to ground our discussion we describe four concrete examples of patients' invisible work, explore the impact on health-care operations, and examine the ramifications for patients themselves. Although we present specific examples from critical incident interviews and information logs in phase 3, they illustrate overarching themes that emerged in each phase of this study.

Obtain and maintain state awareness: What's going on?

To be informed participants in distributed care contexts, patients require information about their evolving health status vis-à-vis their specific cancer care trajectory. In our study, patients struggled to obtain information about their current health situation, a concept we call "state awareness." When patients failed to obtain state awareness—and update this awareness as their health situation evolved—patients experienced knowledge deficits that inhibited their ability to understand their health situation. Patients responded in ways that drained staff resources and created institutional inefficiencies at the treatment center.

To illustrate, consider the case of Lois, a 56-year bookkeeper, diagnosed with invasive breast cancer. After undergoing a bilateral mastectomy, she recuperated at home waiting for information from the clinic about pathology results and subsequent care procedures indicated for her cancer. When Wednesday—the latest day she was told she would receive the information—passed, Lois's anxiety elevated. She tried to obtain information about her health status from the treatment center but her efforts devolved into a morass of 19 communication episodes resulting from:

- Unclear communication channels: "I didn't know exactly who I needed to call, if I needed to call over there [the university] or the [offsite breast] clinic or where. So I thought I'd try [people at both locations].
- Lack of responsiveness: "I didn't hear anything [back from messages she left]… I tried every single number on that [business card] and I couldn't get a live person. So I thought …[raises voice] I'm just going to call and leave a message everywhere!
- Ambiguous answers and information gatekeeping: "[the nurse] called me back this morning and she told me that she knew that they had met, all the doctors, and discussed me. And that…she would rather have me talk to [the breast surgeon] rather than-you know-her telling me things that maybe she shouldn't be telling me."
- Duplicate effort: Staff from three different departments attempted to untangle the problem. Actors included the clinic coordinator, breast surgeon's nurse, breast surgeon, medical oncologist, nurse advice line staff, medical oncologist's scheduler, and the receptionist. The work included impromptu hallway conversations, notes left on keyboards, messages left on voice mail, messages forwarded through clerical

staff and unneeded follow-up appointments squeezed into the surgeon's full schedule.

Lois illustrates four findings in our study of patients' invisible work: First, lack of information stimulated emotional distress. Without information, especially when this information is expected (e.g., Lois was told that she would receive news by Wednesday) and they are away from the treatment center, patients experienced a surge of emotional distress. Second, emotional distress stimulated action. In multiple instances, patients acted by engaging in rapid-fire communication to obtain information, understand the status of their requests for information, and discern logical next steps. Consequently, staff in different clinical specialties (e.g., surgery, medical oncology) across a range of roles (e.g., schedulers, clinical coordinators, nurses, physicians) worked in parallel—routinely duplicating effort—to understand the problem and communicate with the patient. Moreover, patients' expressed that their anxiety increases in proportion to the lack of responsiveness to their requests for information. Third, successful information provision and responsive communication has potential to ameliorates patients' distress by reducing uncertainty about the status of what is known institutionally (e.g., this is where you are in our institutional process) and clinically (e.g., pathology still under review). For example, once she receives the basic information Lois's tone changes dramatically (e.g., she uses the word 'happy' multiple times to describe her situation and interactions with clinic staff) even though nothing clinically has been resolved. For example, Lois remarked: "I kind of know which direction [to go] now."

Bridge Inter-Institutional Care: Caught In Between

A key task for patients who receive care at multiple treatment centers is to bridge inter-institutional care. This work is particularly important for patients who live away from large urban centers and thus lack access to cancer centers with cutting edge research and clinical care. Such patients regularly receive some care at cancer centers with follow-up at local institutions. However, these patients must work to maintain continuity of care between different institutions.

To illustrate, consider the case of Nancy who attempts to bridge surgical care between the nearest cancer center 5 hours away—where she underwent a mastectomy—and her local hospital. Nancy is distraught because "there are drain tubes stuck inside me and they need to be taken out." Although staff at the cancer center suggests an expedient strategy to get the drains removed locally, she encounters an unexpected glitch. The local hospital demands additional information about her drains before proceeding. She spends the day on the telephone trying to reach people with technical information required and relay that information to the local hospital.

Nancy demonstrates three barriers patients experience when trying to bridge care between multiple institutions. First, patients experience variations in operating procedures between health-care organizations. Nancy encounters unexpected problems because unlike the cancer center, "it's not as easy as just calling up and walking in…to get an appointment. [the local hospital] wants to know the drain tube brand so they make sure that they have

everything they need to take it out." Consequently, Nancy becomes a de-facto information courier shuttling medical information from one institution to another.

Second, patients lack procedural information to manage inter-institutional care given these variations. Nancy discovers that she received only partial task information. Although she receives medically valid task information (e.g. remove surgical drains locally is medically expedient), it lacks actionable specificity given the diversity of health-care operations in different organizational settings. Although it is unreasonable to expect staff at the cancer center to know other hospitals' operating procedures in detail, patients require procedural information (e.g., every institution is different, you may need to provide additional information, contact them in advance to establish a plan) in addition to clinical options.

Third, patients experience inefficient communication which inhibits their ability to communicate information across institutional boundaries. By the time we conduct the critical incident debriefing, Nancy is seven voice mails, three telephone conversations, and over 24 hours after her initial phone call to the treatment center. Nancy's drains remained unnecessarily embedded in her chest.

Manage Dependencies: Tripping Over Interrelationships

Another key task for patients is to manage dependencies between inter-related actions and events during cancer care. The challenge for patients is that they discover dependencies during emergent events, with little or no time to plan in advance. To illustrate, consider the case of Emily, a sales executive with a graduate degree, who is undergoing neoadjuvant chemotherapy for breast cancer and is also planning for upcoming surgery, the next phase in her treatment plan. Emily arrives at her planning appointment with her tightly-scheduled surgeon only to discover that she lacks key diagnostic information necessary for treatment planning:

> "[surgeon rifles through her file] 'Where's your genetic test?' And I'm like, 'Well, I thought I'd do it later.' And she's like, 'Well, do you realize that if it comes back positive, we'll probably want to do a bilateral mastectomy?' and I'm like: 'no, you know. Nobody told me that,' you know, so … I felt really dumb and bad, but it's like you don't know what you don't know."

In this case, the clinical team neglected to inform Emily that the results of her genetic tests could influence the type and timing of the surgery they would recommend. Thus, although they recommended the test and the patient intended to have it done, she did not understand the interdependency between one part of her plan (to get the genetic test) and another part of her plan (to have surgery to remove the cancerous tumor). The impact on Emily is significant because the genetic test takes three weeks to process and she must try to re-schedule with an already over-scheduled surgeon.

Resolve Inconsistent Recommendations: Reconciling Invisible Justifications

In a distributed system of care, clinicians' recommendations sometimes vary and patients must resolve inconsistent recommendations. To illustrate, consider the case of Donna, a 39 year old project manager. After undergoing chemotherapy and bilateral mastectomies at a cancer center, she returns to her local hospital system for follow-up consultations. Despite recommendations from the cancer-center surgeon that she required no further treatment, her local medical oncologist referred her to a radiation oncologist within her local health-care system for further evaluation. When the local radiation oncologist recommended radiation, Donna was shocked because she had already started the breast reconstruction process, which would interact with the proposed radiation treatment:

> "I kind of have to weigh the two [opposing recommendations] against each other. [local radiation oncologist] told me that…she had she felt compelled to recommend that I have the radiation therapy…[cancer center surgeon] goes: 'you absolutely do not need radiation.' He said um-he said we got such wide margins with you!'"

Patients like Donna illustrate how patients lack resources to resolve inconsistent recommendations. First, patients lack explicit justifications for clinical recommendations. Without evidence to contextualize the recommendation (e.g., research studies, institutional protocols, and diagnostic results), patients cannot evaluate individual recommendations. In this example, Donna appeared to receive only partial justification for the respective decisions and these justifications came predominately in oral form. For example, without explicit access to her pathology report or the specific study cited during the consultation, Donna could not understand the specific details the local radiation oncologist used to justify her recommendation.

Second, patients lack means to discuss details of competing recommendations with different clinicians. In this case, Donna discussed the competing recommendations with her surgeon with little mention of the justification behind the recommendation provided by her local radiation oncologist. Moreover, Donna did not appear to make an evidence-based decision. After listening to the cancer center surgeon repeat his recommendation, Donna simply decided not to have further radiation treatment without fully understanding differences between the two recommendations.

Patterns of Patients' Invisible Work: Implications for Patient-centered Research and Design

As we studied patients' invisible work and tracked their hidden tasks, four overarching patterns emerged that inform future patient-centered research and design. The first pattern is that patients' invisible work is reactive and bursty. An unexpected event occurs (e.g., Betsy receives competing treatment recommendations, Lois fails to receive health status

information, Nancy requires new technical information, Emily fails to complete diagnostics in time for treatment planning) which is followed by a burst of patient activity to understand and address the problem. Many of these bursts occurred while patients were away from the treatment center, required patients to communicate with clinical actors distributed across time and space, and transpired between periods of inactivity. One implication of this finding is that researchers require sustained data collection strategies that are not tied to specific location, focused exclusively on clinical encounters with individual clinicians, or single shot data collection. For designers, the implication is that patients require tools to help them 'even out' their work, making it more predictable and sustainable over time.

The second pattern is that these bursts of activity consumed patients' precious personal resources. Instead of spending time and energy on healing, relationships, and everyday life—patients continued at home/work with personal/professional responsibilities as well as being a cancer patient—patients expended their limited personal resources to obtain information, maintain continuity of care, managing dependencies, and reconcile inconsistent recommendations. Moreover, these tasks were emotionally charged and patients blamed themselves or others (e.g., the clinic, specific clinicians), which poisoned their perspective and exacerbated existing stress. The implication of this finding for researchers is twofold: researchers (1) require elicitation techniques that target patient actions—and ways to support those actions—masked by understandably strong emotions and (2) should explore means to collect data that minimizes the cognitive and emotional load on patients who are already overloaded. For designers the implication is to remain cognizant of the role of emotion in patients' work and the potential of emotion to influence the use of designed artifacts (c.f. Norman 2004).

The third pattern is that these reactive bursts of work remain under articulated and difficult to study. Over the course of this research, we relied on extended conversations and structured critical incident debriefing sessions to drill down into work that patients did not readily discuss. For example, patients generally responded to initial questioning (e.g., What's occurred since we last talked?) by describing their experience emotionally (e.g., I'm exhausted, I'm stressed out) or dismissing their effort (e.g., Well, not much, really). Persistent, structured probing over time unmasked the details of their work and how much effort they actually expended, even when patients initially downplayed their work-as-a-patient. To supplement verbal descriptions provided during critical incident debriefings, we also asked patients to log their actions related to bursts of activity in an abbreviated information log. Together, these techniques proved especially valuable for studying patients' invisible work. Another well-aligned strategy for both researchers and designers is to involve patients through participatory research and design methodologies, further integrating patients into the data collection and analysis process to unveil the intricacies of patients' under articulated work.

The fourth pattern is that reducing the burden of patients' work necessitates cooperation between patients and clinicians. Without professional expertise in cancer care, patients require interaction with clinicians to address their clinical concerns during cancer

care. Similarly, clinicians require interaction with patients because clinicians remain removed—in time and space—from direct patient experience in which many problems are initially detected. These two forms of expertise—patient expertise and clinical expertise—are different (c.f., Civan and Pratt 2007). Unfortunately, these two forms of expertise rarely interact because patients and clinicians act largely independent of one another with few tools to support ongoing cooperation. Therefore, patients create workarounds that could be solved more efficiently if they received assistance from clinicians. Moreover, as Lois and Nancy demonstrated, ineffective communication systems thwart patients' efforts to notify clinicians and work together with them to resolve problems efficiently. One implication of this finding is that researchers, designers, and health-care operations managers should explore means to support required cooperation between patients and their clinicians. To conclude, we explore initial requirements for common information spaces and its potential impact on patients' invisible work.

Common Information Spaces: Improving Healthcare through Design

How can we support cooperation through design? Researchers in the field of CSCW note that cooperation of actors distributed in time and space requires: (1) "the active construction by the participants of a common information space where the meanings of the shared objects are debated and resolved (Schmidt and Bannon 1992:27)" and (2) [that] both the producer and the receiver [of information] consciously make an effort to understand each other's context - of production and use, so that even though the efforts may be distributed over time and space, there is a form of communication, of 'putting in common', going on in [cooperative] activity (Bannon 2000:5)."

Extending their conceptual work on common information spaces (CIS), we provide an initial set of functional requirements for CIS designed explicitly to ease patients' work in cancer care through cooperation with clinicians. Specifically, CIS must provide an interactive information space in which patients can cooperate with clinicians to highlight dependencies, preserve state information, link recommendations to justifications, couple clinical options with procedural task information, and track progress of clinical and logistical tasks. To illustrate, we return to three cases and present a brief formative analysis to examine the potential of CIS in the cancer-care context. For example:

- Betsy's local radiation oncologist could use a CIS to construct a lightweight representation of his justifications for additional radiation treatment by (1) posting the pathology report on line (2) linking specific data in the pathology report to the research study influencing his decision and (3) annotating that link with his personal recommendation based on his professional opinion. This representation is preserved so Betsy can reflect on it further at home. Moreover, she can share this representation with the cancer center surgeon (who disagrees with the local radiation oncologist) who provides his own links to studies and explains his differing professional opinion via annotations. Thus, Betsy could use the CIS to learn the competing recommendations and make an informed decision regarding

further treatment through explicit representations that both clinicians and patients build, share, and modify within the CIS.

- Lois's clinicians could aid her work by using a CIS to (1) post the status of their deliberations (e.g., surgeon consulted with clinician A but still needs input from clinician B) to update Lois on the status of the organizational process involved in addressing her pressing information need, (2) provide a representation of dependencies (e.g., these diagnostics would indicate surgical option A, other diagnostics would indicate surgical option B), and (3) link each clinical options with task information about next steps (e.g., who to contact and how to contact them) once a decision is reached. In turn, Lois could use the CIS to track the decision-making process and review logistical tasks for different scenarios without relying on inefficient voice communications.

- Nancy could post a question about getting her drains out locally to the CIS, which sends an alert to a nurse who reads the question. Using the CIS, the nurse indicates that the question had been read and links the question to the surgeon's response. At discharge—still days before the drains need to be removed—a nurse links the option to get the drains out locally with procedural task information (e.g., she should contact the local hospital in advance to set up a plan). As she recovers, Nancy consults the CIS to review next steps and discovers the nurse's suggestion. As Nancy develops a plan with the local hospital, she posts a representation of that plan, including the request for additional information about the surgical drains. In turn, the nurse receives an alert, finds the appropriate information, and links a technical description of the surgical drains to her plan with her local hospital.

In these examples, the CIS provides two critical services that remain poorly supported in the current cancer-care environment. First, the CIS facilitates cooperation through explicit representations constructed by either the patient or their clinician. In the current cancer-care environment, patients and clinicians rely on heavily on oral communication to communicate their respective views on the patients' evolving health situation. Second, the CIS facilitates cooperation through interaction by allowing both the patients and their clinicians to develop shared understandings of each others' needs and perspectives through iterative refinement of these representations. In the current structure of cancer care, clinicians' time constraints and ineffective use of voice mail inhibit nuanced interactions required to construct a shared representation of the patients' evolving health situation.

REFERENCES

Bannon, Liam
2000   "Understanding Common Information Spaces in CSCW" Position paper for
            Workshop on Common Information Spaces, Copenhagen, August 23-25.
            Accessed online http://www.it-c.dk/people/schmidt/ciscph2000/Bannon.pdf

Boberg, E. W., D. H. Gustafson, R. P. Hawkins, K. P. Offord, C. Koch, K. Y. Wen, K. Kreutz, and A. Salner.

2003   "Assessing the Unmet Information, Support and Care Delivery Needs of Men with Prostate Cancer." *Patient Education and Counseling* 49(3): 233-42.

Civan, Andrea and Wanda Pratt
(in press)" Threading Together Patient Expertise." Proceedings of the American Medical Informatics Association Fall Symposium (AMIA'07). Chicago, IL.

Burt, C.W. and Hing E.
2005   "Use of Computerized Clinical Support Systems in Medical Settings: United States, 2001–03. Advance Data from Vital and Health Statistics; No. 353." Hyattsville, Maryland: National Center for Health Statistics.

Degner, L. F., L. J. Kristjanson, D. Bowman, J. A. Sloan, K. C. Carriere, J. O'Neil, B. Bilodeau, P. Watson, and B. Mueller.
1997   "Information Needs and Decisional Preferences in Women with Breast Cancer." *JAMA* 277(18): 1485-92.

Kohn, Linda T., Janet M. Corrigan, and Molla S. Donaldson.
2000   *To Err Is Human: Building a Safer Health System*. Washington, D.C.: National Academy Press.

Kravitz, R. L., R. A. Bell, R. Azari, E. Krupat, S. Kelly-Reif, and D. Thom.
2002   "Request Fulfillment in Office Practice: Antecedents and Relationship to Outcomes." *Medical Care* 40(1): 38-51.

Laine, C. , and F. Davidoff.
1996   "Patient-Centered Medicine. A Professional Evolution." *JAMA* 275(2): 152-56.

Norman, Donald
2004   *Emotional Design*. New York: Basic Books.

Pratt, Wanda, Kenton T. Unruh, Andrea Civan and Meredith M. Skeels
2006   "Managing health information in your life." *Communications of the Association for Computing Machinery* (CACM), 49(1): 51-55.

Schmidt, Kjeld and Liam Bannon
1992   "Taking CSCW Seriously: Supporting Articulation Work." *Computer Supported Cooperative Work* 1(1):7-40.

Star, Susan Leigh, and A. L. Strauss.
1999   "Layers of Silence, Arenas of Voice: The Ecology of Visible and Invisible Work." *Computer Supported Cooperative Work* 8: 9-30.

Suchman, Lucy

1995   "Making Work Visible." *Communications of the ACM.* 38(9): 56-64.

Tang, Paul C. , Joan S. Ash, David W. Bates, J. Marc Overhage, and Daniel Z. Sands.
2006   "Personal Health Records: Definitions, Benefits, and Strategies for Overcoming
        Barriers to Adoption." *Journal of the American Medical Informatics Association* 13(2): 121-
        26.

Unruh, Kenton T., and Wanda Pratt.
2007   "Patients as Actors: The Patient's Role in Detecting, Preventing, and Recovering
        from Medical Errors." *International Journal of Medical Informatics* 76(Supplement 1):
        236-44.

The Secret Life of Medical Records: A Study of Medical Records and the People Who Manage Them

NATHANIEL MARTIN
PATRICIA WALL
Xerox Innovation Group, Xerox Corporation

A study of the practices surrounding paper medical records captured key aspects of the work necessary to support this crucial element of health care. It uncovered work that was invisible to the nurses and physicians who use the records. This invisible work comprises tasks necessary to find and deliver the records as well as those necessary to ensure that the records are accurate and up to date. This study was undertaken because medical records are undergoing a transition from paper to digital systems, which will impact the practices of users of these systems at all levels, including clerical and medical staff. This is an area of particular interest to our organization as we look to provide technologies and services that enable seamless integration of paper and digital worlds. New technologies and practices will need to be developed to accomplish what is now being done invisibly.

INTRODUCTION

Medical records capture a clinical perspective on the history of our health. A medical record is a critical component in the continuity of care enabling physicians, nurses and specialists (called providers) to treat a patient with knowledge of the history and current state of a patient's health. At present, although most medical records in physicians' offices are paper, there is a growing momentum towards transitioning to electronic medical records (EMR).

This study was undertaken because our organization is focused on research that enables seamless integration of paper and digital worlds. The examination of the largely paper-based world of medical records is of particular interest because much of this world is undergoing or considering the transition to digital systems. Studying healthcare environments affords us the opportunity to observe the issues this transition poses and to explore the development of technology and services solutions that can support this transition and subsequent work practices.

Previous studies (Heath et al, 2002) explored interactions between patients and healthcare providers. Heath and Luff (1996) found that medical practitioners continued to use paper records along with a newly introduced EMR. Other studies (Clarke et al, 2001) have examined the use of an EMR in medical exams and issues an EMR poses in physician-patient interactions (Ventres et al, 2005). Workflow changes required by physicians using an EMR have also been discussed (Puffer et al, 2007). Martin et al (2005) studied the issues involved in the integration and implementation of an EMR system in a large hospital. Fitzpatrick (2000) studied the implications of the use of paper records for EMR systems from the point of view of the providers.

While there have been several studies looking at the use of medical records in the exam room, there has been relatively little exploration of the life of a medical record and the work it takes to manage them outside the exam room. There are entire departments devoted to keeping track of and maintaining the records. How do they organize records? How does a record arrive at the exam room for the appropriate physician and patient? What happens to records after the exam? How are records updated with new information? On the surface, this work looks rather unremarkable, almost invisible in the day to day patient-physician interactions. Upon closer review, we observed that the records have a secret life that takes place beneath the notice of those who rely on and use the information in the records. We will discuss our observations about this work and some of the implications this has for those who perform this work as well as for the technologies that support this work now and in the future.

DESCRIPTION OF STUDY AND METHODOLOGY

The study was conducted with six health care facilities in 2007, representing medical practices in a range of settings, including: multi-practice clinics in urban, rural and small city settings, a pediatrics practice in a suburban setting, an internal medicine practice in an urban setting, and a large urban hospital. A multi-practice clinic in a rural setting was our primary field site. This was fortunate as the site was in the process of evaluating various EMR options for potential purchase. The other sites provided additional perspectives on the records practices across a variety of environments. The sites were found primarily through personal contacts and through participation in a local health information technology conference. The sites were in various stages of considering or adopting EMR systems. All the sites expressed concerns about migrating from primarily paper-based records to electronic records.

The primary fieldwork consisted of open-ended interviews and observations of medical records staff as they performed records management activities. We also conducted interviews of physicians, IT staff and management to get an overall sense of the issues associated with paper medical records and directions regarding the future of medical records in their facilities.

Our team consisted of ethnographers and technologists. In our experience, including technologists in fieldwork enriches our results and streamlines the transfer of findings to those exploring technology solutions. Our field interactions were videotaped. The videotapes were transcribed and used as the basis to create representations of the work. The representations were shared with the research team to promote exploration of potential technology solutions that could be brought to bear on records management. We also took the representations back to the sites we studied in order to share, verify and update our findings. In addition, we used these feedback sessions with participants as an opportunity to explore and prioritize areas for further technology development.

FINDINGS

Our findings focus on the secret life of the medical records: their life and travels beyond the exam room. We describe the charts and their use to provide the context for the roles and tasks of those who manage the records and the challenges they face. We found implications for technology that transcends the paper records in the invisible work that supports them.

Figure 1 Paper-based patient charts.

Medical Records (Charts)

All the sites we observed used paper records, commonly referred to as 'charts'. Two of the sites were in the beginning stages of transitioning to an EMR system. The others were considering the transition to an EMR.

Chart organization. At the locations we studied, the paper records for each patient are collected into a manila folder. The folder and its content are called a chart. Charts are stored on shelves with a tab along the short edge of the chart. The tab has color coded labels (numbers and/or letters), which display the chart index number or the name of the patient. The multi-colored numbers or letters make it easy to see when the charts are misplaced, because the visual regularity imposed by the numeric or alphabetical order is disrupted by the misplaced chart. Most of the charts were on the chart shelves, though they could be found in many locations throughout the clinic, such as a doctor's office, the front desk, the medical records department waiting, or the correspondence clerk's office.

Each practice that we observed organized the content of their charts differently. For example, one location kept the documents loose in the manila folder with the most recent information in the front, whereas most attached the documents to folder either attaching them to the left and right covers of the chart with brads or attaching all the documents in the center of the covers. Charts with attached documents had tabs separating the content. For example, in one site there were sections for patient history, progress notes, lab reports, x-rays and correspondence. The particular labels on the tabs differed somewhat between practices.

Figure 2 Patient Chart is organized by tabs along the side. Color coded labels along the bottom identify the patient.

Uses of Medical Charts

We observed two categories of chart use: use in the patient exam and use in decisions outside the exam. Different work practices support these uses.

Exams may be either scheduled or unscheduled. Unscheduled visits are usually sick visits, where the patient calls the same day for an appointment due to illness. When the patient arrives for an exam, the front desk produces an encounter form that contains the patient's personal information (address, phone number, date of birth), a check list of various services or treatments that may be provided (e.g., physicals, fracture care, injections) and a place for the diagnosis. When the provider is ready, the patient is escorted, along with the medical record and an encounter form, to the exam room. The provider reviews the medical record and examines the patient. When the patient leaves, the encounter form is sent to be processed for billing. The provider adds progress notes to the medical record and returns it to the medical records department. The provider may write the notes themselves or may dictate them for later transcription. Scheduled exams differ from unscheduled exams in that the charts are pulled and prepared the day before the visit; unscheduled exams require an ad hoc chart pull.

The activities that do not involve a patient exam include analyzing lab results, replying to correspondence, refilling prescriptions, and replying to phone calls. Analyzing lab results and replying to correspondence take place on a slower schedule than prescription refills and replying to phone calls. Prescriptions are filled within 48 hours and phone calls are returned as soon as possible. Lab results may return days after they are requested and correspondence often arrive in the mail, so they are less urgent. A physician may request that a lab reply by phone if he or she needs results urgently, but then these would be treated as phone calls.

Roles and Responsibilities of those who Manage/Maintain Records

Behind the scenes, the medical records staff manages, maintains, updates and moves the records to where they need to be. They are responsible for ensuring record integrity so the records are accurate, up-to-date, and accessible.

The staff spends most of their effort on two kinds of activities: locating/moving the charts and transferring information into the charts. They have established workflows and processes to make sure that all incoming information is reviewed and if necessary, signed off
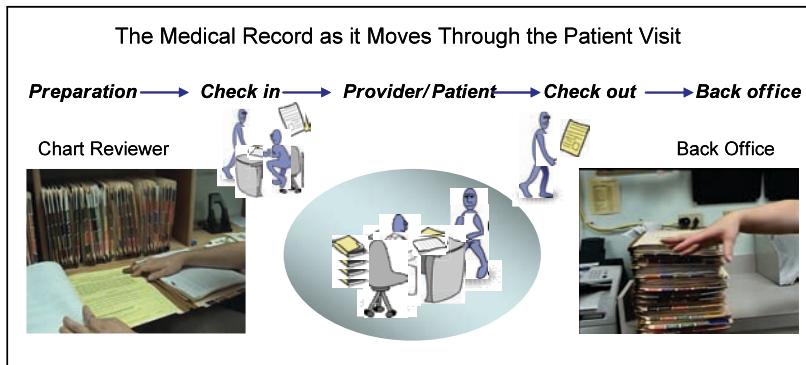
Figure 3 The medical record as it moves through the patient visit: the Chart Reviewer prepares the chart for use by the provider in the exam room. During/after the exam the provider adds progress notes and the chart is moved onto the back office for any follow-up, e.g., referrals, transcription and re-filing.

by physicians, and integrated with the medical record. They receive all the charts as they leave the exam rooms, check and then re-file them. They also pull and prepare charts for the next day's appointments.

Our primary site described records management responsibilities in terms of four key roles: chart reviewer, runner, sorter and mail processor. These roles were not unique to this site as we saw similar work being done at the other sites. Any member of the staff may take on any of the roles during the course of the day in order to meet the changing demands of the day's workload.

Chart Reviewer. The chart reviewer pulls the all charts for the next day's scheduled appointments and checks the charts to make sure all the required documentation and paper for the doctor's progress notes are available. If any of the required documents need to be updated, a notation is made in the computerized Practice Management System (PMS) so the receptionist at the front desk can obtain the updates when the patient checks in for their appointment. The chart reviewer worked primarily in an office at a desk with a computer that could access the PMS, giving her access to the schedule.

Runner. The runner pulls the charts for ad hoc use and delivers the charts to the place they will be needed. The runner looks up the chart number in the patient index in the PMS and then prepares an out-guide (a plastic folder that indicates the reason the chart was pulled). If the chart is on the shelves, the chart is removed and replaced by the out-guide and the chart is then delivered. If the chart is not on the shelves, the information in the out-guide is used to determine where the chart was taken. The runner works throughout the clinic.

Sorter. The sorter reviews the charts when they return to the medical records department, updates the information in the charts and returns them to the shelves. Any items that are clipped to the front of the folder are checked to see that they have been

processed and then are inserted in the chart. The sorter checks the rest of the chart to make sure that everything is in order. The sorter works standing at a table where the runner leaves the returned charts.

Mail Processor. The mail processor manages the incoming correspondence, pulling the charts and attaching the correspondence so the providers can deal with the correspondence in the context of the chart. The mail processor determines whether the correspondence required the chart, sending it only if needed. The provider could request the chart if it was not sent. The mail processor also works in an office at a desk, but she collects the mail from various locations, some of which were outside the clinic.

The staff in the records department takes primary responsibility for particular roles at any one time, but there is considerable overlap and sharing of information in order to get the work done. There is constant interaction between the medical records staff as they address incoming calls, locate records and divide the incoming workload. There is also ongoing interaction with members of medical and office staff as the records department is centrally located between the front reception area and the nursing stations and exam rooms. Even with the centrality of medical records, much of the department's work is invisible. This invisibility became evident when we presented our findings to the management team at one of our field sites. The team has representatives from each of the departments in the clinic, including operations, records management, IT and clinical (physicians). They were surprised by the complexity and difficulty of the medical records staff's work.

Figure 4 Behind the scenes the records department keeps the records moving and up to date. The mail processor collects all incoming mail and forwards it onto the appropriate provider, attaching the appropriate patient chart if needed. The runner pulls/delivers charts based on requests (from other departments, phone messages). The sorter adds new information to patient charts and re-files the charts.

Features and Challenges of the Work

Although on the surface, the work of the medical records staff looks mundane--a clerical job of processing folders and filing records--the work is quite physically and

cognitively challenging. Following are some of the features and challenges we observed in the course of the study.

Managing the paper: Sellen and Harper (2002) describe several limitations of paper documents. These limitations include: paper must be used locally, it occupies physical space, it requires physical delivery and cannot easily be shared, paper cannot easily be altered or incorporated into another document, it cannot easily be copied, and it cannot display variable or moving images. Paper records can only be used in one place at a time, so there is potential conflict when a chart is needed for multiple tasks. In the constant activity of the clinic, the charts can also be misplaced, and occasionally even lost. Their physicality means that they consume space and in large practices they may consume significant space. The very nature of the records as paper documents limits the options for how the work of the records department can be accomplished.

Locating and moving records: Because paper records exist in only one place at a time, a record must be located and moved to the place it is needed before it can be used. Finding records requires effort. For example, the runner may discover that a chart is already in use when he or she needs to pull and deliver it. The runner must search for that chart. Searching for a chart requires that the runner know the typical workflow, and likely bottlenecks in the workflow, for a chart given any starting place in the clinic. The runner calculates the time that has passed since the chart was removed (as indicated by the out-guide left in its place) and the likely route of the chart during that time.

Moving the charts is also difficult. As might be anticipated from the title of the job, the runner covers a lot of territory through the clinic, searching for and delivering charts. In addition, some of the files are quite thick, which makes pulling charts, delivering them throughout the clinic, and re-filing them on shelves physically demanding.

At times, entire charts or segments of a chart need to be transferred to other locations. When a patient transfers to another practice, the entire chart needs to copied and mailed to the new location. There are also occasions when part of a chart needs to be shared with another provider. In this case, the required sections of the chart must be extracted, copied and re-inserted into the chart. The copied documents are sent to the other provider, where they then need to be incorporated into a potentially very different records system.

Decision Making: Finding the chart, though challenging, is not as difficult as determining what to do with the chart once it is found. If a search was initiated because the chart is needed in two places at once, the runner must determine where the chart should go based on her judgment of the relative importance of the tasks that require the chart. Similar judgments must be made when determining whether or not to include a chart along with a piece of correspondence for review by the physicians. These decisions can be clinically relevant. The willingness to delegate these decisions to clerical staff indicates that the providers have confidence in the medical records staff.

Managing Interruptions: Another challenging aspect of this work is managing the interruptions. Phone calls, prescription refill requests and unscheduled appointments come in throughout the day interrupting the current tasks. Members of the records department must be able to stop one task, take care of the interrupting task, and then return to the original task. The interrupting task may itself be interrupted requiring the staff to keep several tasks in mind at the same time. As Rouncefield et al. (1994) point out, such interruptions are common in office work significantly affecting the idealized version of the described processes. Indeed, in our observations, it was often difficult to see the described process through the interruptions.

Coordination and communication: The records department is a bustling center of information flow into and out of the clinic. Managing the information is a critical aspect of providing quality patient care. Key to their success is the ability to respond to the myriad requests and inquiries for information while maintaining an underlying sense of order to the maintenance and upkeep of the records. Although there are formal procedures established for the main roles and activities in the department, it is the ongoing interactions and coordination of activities among the team that enable the work to be accomplished. Everyone is tuned into the overall status of what needs to be done, while maintaining a focus on their individual activities.

Electronic Medical Records

EMR systems address many of the limitations of paper based systems, ideally enabling sharing of medical information within and among healthcare providers and patients. One would think that the secret life of paper records would have little currency with the adoption of an EMR system, but we found that many of the invisible tasks continue to be needed.

At present, most medical records in U.S. physicians' offices are paper records. Hing et. al, (2007) report that only 29.2% of 2117 survey respondents had any EMR system and only 12.4% had fully implemented an EMR system (i.e. no part was paper). An earlier study found that EMR use was higher in hospital Emergency Departments (31%) and Outpatient Departments (29%) than in physician practices (17%) (Burt and Hing 2005), but penetration was low in all areas.

Adopting an EMR system is an enormous undertaking. The current records in a practice (potentially thousands of charts) need to be transformed into a digital format that map into the file structure of the EMR. The work practices of the clinicians as well as the operational staff who interact with the EMR have to change in significant ways. Because of the potentially disruptive nature of such a transition, hospitals, clinics and private practices are in various stages of considering and/or managing a move to an EMR.

As mentioned earlier, the impact of an EMR on physician practices has been extensively studied. The implications for the work of those who manage the records are not as well understood. There seem to be two phases of EMR adoption that will place different demands on the staff. First, the transition phase is when the EMR is initially installed and all

or part of the existing paper records need to be captured in the EMR. During this phase, the medical records staff continues to maintain the paper records as well as take on new responsibilities that involve transferring data in the paper records into the EMR. The transfer of data could involve a combination of tasks that include manual data entry and scanning the content of the charts in the EMR repository.

Manual data entry requires typing information from the paper record into the EMR. Although time consuming, capturing discrete data is important because it allows the generation of automatic reports, e.g., notifying the provider of patient drug allergies. The EMR cannot recognize the nature of the data if it is hidden in a scanned form, or worse, still in the paper chart on the shelf. Scanning the data requires significant effort due to the large number of pages in the chart and the need to organize and link the documents to the appropriate record/location in the EMR. Records not yet digitized still need to be updated, which means the continued maintenance of both electronic and paper systems.

A second phase of EMR adoption, the use and maintenance phase, starts once the transition phase is complete. Eventually, there should no longer be paper charts to manage. With no paper records to maintain, the tasks of the staff should evolve to support electronic documents and continued integration of documents, e.g., correspondence, that comes into the office in paper form.

We had the opportunity to observe one clinic during the transition to an EMR for their dental records. They used a combination of approaches. They maintained the paper records until a patient scheduled an appointment. At that time, they pulled the paper record and scanned the regulatory documents such as privacy policy acknowledgement. Next, they scanned the dental x-rays for inclusion in the record, if they were up to date. Finally, they sent the chart to the dentistry department where a dental assistant manually entered the data on old procedures into the EMR. They kept the paper chart on the shelf in case the dentist needed to look at old progress notes, but the dentist entered new notes into the EMR system. Each time they performed one of these tasks, they noted on the paper chart that it was complete.

The chart reviewer continued to review the electronic charts in the same way she had with the paper records. That is, she accessed and opened the electronic record to check that the forms were up to date. Any required updates were noted in the PMS. The chart reviewer indicated that initially, scanning the old charts increased her workload significantly. However, this was reduced as more charts were added to the EMR system, thus requiring less scanning. The use of the EMR did not eliminate the need for any of the chart reviewer tasks; it required they now be done online. As the clinic migrates to an EMR system for the medical records, we anticipate that many of the tasks for the other roles will still be required, but will take place online.

Implications for future medical records practices and future technology

The invisible work supporting paper records suggests opportunities for the development of technologies and services that can facilitate the transition to and subsequent use of an EMR.

Although not the focus of our study, previous researchers have highlighted the issues an EMR system poses for providers. Throughout our study, we heard comments by providers about the impacts on physician-patient interactions as well as the costs associated with transitioning to an EMR. Development of EMR interfaces that comprehend and support provider practices and interactions with patients as well as the operational work of clinics and hospitals would be a significant advancement for the adoption of EMR systems and the potential benefits they bring to the quality of healthcare.

From the perspective of medical records management, there are several opportunities for technologies and services to support the paper to digital transition. The initial transition of a medical practice's collection of paper records to a digital format can significantly impact records management practices. Responsibilities of the staff could expand to include scanning and integrating record content into the EMR. There are opportunities for smart document technologies, such as automatic forms recognition and data extraction to capture data from paper records and insert it in appropriate places into the EMR. There are also opportunities for new services focused on the design and implementation of streamlined workflows. Handwritten portions of a record will have to be captured as images or translated / transcribed by people. The state of these technologies and importance of accuracy in the EMR would still require human intervention to prepare records for scanning and to ensure record integrity and quality assurance after they have been digitized. Any proposed changes in workflow should be grounded in an understanding of the complexity and effort required to manage the records now, emphasizing those activities that will continue during and following a transition to an EMR system. The invisibility of some of this work makes real the possibility that it will be overlooked.

Once the records are digitized, the role of the medical records staff could change again, with less time required for scanning. The workflows associated with electronic records management will evolve to incorporate processes to review electronic data and when necessary, update, correct and approve the data. We anticipate that although this work will evolve in many ways, it is likely to remain invisible to the patients and medical staffs. The medical staff will be evolving their own practices with regard to the use of newly digitized records. Evolving practices should not remain invisible to the EMR vendor community. The successful deployment and adoption of EMR systems ultimately rests on the professional and support staffs who make the new systems work, or not, in their particular environments. Although EMR vendors recognize the importance of supporting workflows, the work we observed consisted of more than a series of workflows. It is a complex set of interactions and activities often interrupt driven, where roles and responsibilities dynamically change to accommodate the work to be done. A productive EMR system will need to comprehend

and support this work. The realization of benefits of well designed EMR systems by the medical community can result in improvements in the quality and costs of healthcare.

CONCLUSIONS

The study of medical records practices revealed a range of activities that are necessary in the management of paper-based records. Much of this work is essentially invisible to the providers (and patients) who rely on the records department to ensure that the records, critical components in quality healthcare, are accurate and available. As healthcare providers consider the transition to electronic record systems, it will be important to evaluate how essential practices will be supported, eliminated or transformed by new systems.

Taking an ethnographic approach proved invaluable to our research team as the findings from the study are being used to help shape, within the framework of our business and organization's goals, the concepts and technologies we think will address some of the issues we observed in the field. Without the detailed analysis of the value of these invisible tasks, their importance would become apparent only when the introduction of a new process or technology failed to supply that value. We have not yet had the opportunity to study a site as they complete the transition to an EMR system. This is something we would like to do in the near future. We are also planning on taking the preliminary concepts and prototypes that have been inspired by the people we observed, back into the field so we can obtain their feedback.

REFERENCES

Brun-Cottan, Francoise and Patricia Wall
1995   Using video to re-present the user. *Communications of the ACM*, 38 (5):61-70.

Burt, Catharine W. and Esther Hing
2005   Use of Computerized Clinical Support Systems in Medical Settings: United Stated, 2001-2003. Advance Data from Vital and Health Statistics, #354, March 15, 2005.

Clarke, K.M. , M.J. Harwood, R.N. Procter and M. Rouncefield
2001   The electronic medical record and everyday medical work. *Health Informatics Journal* 7(3-4):168-170.

Fitzpatrick, G.
2000   Understanding the Paper Health Record in Practice: Implications for EHRs. Paper presented at Health Informatics Conference (HIC2000) Adelaide, Australia.

Published in CD Proc. Health Informatics Conference (HIC2000*)*. ,Available from citeseer.ist.psu.edu/469197.html.

Harper, Abigal J. and Richard H. R. Harper
2002   *The Myth of the paperless office.* Cambridge Massachusetts: The MIT Press.

Heath, Christian and Jon Hindmarsh
2002   Analyzing Interaction: Video, ethnography and situated conduct. *In Qualitative Research in Action.* Tim May, ed. pp 99-121. Thousand Oaks, CA: Sage Publications.

Heath, Christian and Paul Luff
1996   "Documents and Professional Practice: 'bad' organizational reasons for 'good' clinical records" *Computer Supported Cooperative Work* '96. Pp. 354-363. Cambridge, MA: ACM.

Hing, Esther S., Catharine W. Burt, and David A. Woodwell
2007   Electronic Medical Records Use by Office-Based Physicians and Their Practices: United States, 2006. *In* Advance Data from Vital and Health Statistics, CDC, #393 October 26, 2007.

Martin, David, Mark Rouncefield, Jacki O'Neill, Mark Hartswood and Dave Randall
2005   Timing in the art of Integration: That's how the Bastille got stormed. Paper presented at Group 05, Sanibel Island, Florida, USA, November 6-9.

Puffer, Matthew J., Jennifer A. Ferguson, Brian C. Wright, John Osborn, Amerett L. Anshus, B. Pat Cahill, Janine Kamath and Michael Ryan
2007   Partnering with Clinical Providers to Enhance the Efficiency of an EMR. *Journal of Healthcare Information Management* 21(1):25-32.

Rouncefield, Mark, John A. Hughes, Tom Rodden, and Stephen Villar
1994   Working with "Constant Interruption": CSCW and the Small Office. *In* Computer Supported Cooperative Work '94. pp. 275-286. Cambridge, MA: ACM.

Ventres, William, Sarah Kooienga, Nancy Vuckovic, Ryan Marlin, Peggy Hygren and Valier Stewart
2006   Physicians, Patients and the Electronic Health Record: An Ethnographic Analysis. *Annals of Family Medicine* 4:124-131.

Ventres, William, Sarah Kooienga, Ryan Marlin, Nancy Vuckovic and Valerie Stewart.
2005   Clinician Style and Examination Room Computers: A Video Ethnography. *Family Medicine* 37(4):276-281.

Wallace, Tim, editor

2004   *Tourism and Applied Anthropologists: Linking Theory and Practice.* NAPA Bulletin 23.
        Washington, DC: American Anthropological Association.

The Translucence of Twitter

INGRID ERICKSON

Center for Work, Technology & Organization, Stanford University

Erickson and Kellogg's construction of social translucence suggests that collaboration tools can be designed more effectively by balancing elements of visibility and awareness among members of the user community to instill a norm of accountability. This paper questions whether the microblogging tool, Twitter, fits these criteria. Building on interview and artifactual data, I find that although Twitter use affords ample visibility of individuals' networks, thoughts and movements, it is less effective at supporting awareness. Despite this, evidence suggests that accountability can be achieved via indirect awareness maneuvers and around critical incident to yield a form of peripheral translucence. The paper concludes with considerations of how ethnography might best address and evaluate questions of community, accountability, and translucence in future research.

INTRODUCTION

To make something visible connotes either the proactive prevention of hiding or the creative drawing into the light. Scholars of work have pursued both agendas in their study of informal interaction[1] in the workplace. When informal exchanges were first documented and legitimized by early organizational theorists such as Blau (1955), Selznick (1957), and Roy (1959), a new stream of research was established that has continued to shine brightly ever since. The large-scale introduction of communication technologies into the workplace in the 1980s provided scholars with a new opportunity to highlight informal work practice, this time mediated by tools like email (e.g., Sproull and Kiesler 1986). Later research emphasized the use of instant messaging, or chat, for its ability to provide a synchronous means of contact among distributed colleagues (e.g., Bradner, et al. 1999). Backchanneling, a type of chat that entails having a private conversation among a closed set of individuals during an open presentation or meeting, was also identified by researchers as a means for informal dialogue, particularly when used as a tool for collective critique and commentary (e.g., Cogdill, et al. 2001). Very recently, scholars have begun to investigate both employee blogging (e.g., Jackson, et al. 2007) and corporate social networking practices (e.g., DiMicco and Millen 2007) to understand how these tools' combination of persistence and open-ended expression may be enabling informal interaction in new ways.

Within this corpus, Erickson and Kellogg introduced the notion of 'social translucence' as a design goal for efficacious socio-technical systems, both formal and informal (Erickson, et al. 2002; Erickson and Kellogg 2000; Erickson and Kellogg 2003; Kellogg and Erickson 2002). Building on a qualitative study of the diagrammatic chat application, Babble, the authors articulated "the belief that it is possible to design digital systems such that people's presence and activity, made appropriately perceptible, will create accountability and more easily coordinated action" (Kellogg and Erickson 2002, p.1). A combination of visibility,

---

[1] Here I would follow on the ideas of Dourish and Bly (1992) in defining informal interaction as that which is typically indirect, non-engaged and occurs in the background to the main tasks at hand.

awareness, and accountability, socially translucent designs are meant to act like the window in a door—revealing clues to what might be ahead, but without full detail.

The authors describe the combination of visibility, awareness and accountability using the example of organizing book chapters for an upcoming edited volume. In this case, a group of co-located people move about a room putting various chapters under what they perceive to be the appropriate section headings. *Visibility* is characterized by the unobstructed view everyone has of everyone else in the room—it is possible to see where groups form or conversations break out, or where certain individuals linger and for how long. As Erickson and Kellogg put it (2000, p. 63), " . . . as in the case of the door, the participants could see what was happening, and thus awareness and accountability came into play." Joint engagement brings individuals into *awareness* of one another triggering a sense of socially appropriate behavior as well as an acknowledgement of mutual visibility: "Awareness brings our social roles into play to govern our actions. . . "(200, p. 40). Finally, knowing that one's visible actions assessable via the awareness of others engenders *accountability*. Accountability is an outcome of the mutual awareness and visibility afforded by socially translucent design: individuals choose to adhere to normative standards of speech and behavior because they know that their words and actions will noticed and assessed. [2]

In the example of the windowed door, the view provided by the window tends to make one feel accountable for any injury caused by abruptly opening the door onto someone. This works in the following way. The fact that there is a window allows a person to see whether or not anyone else is on the other side, and, if they are, not only alerts the potential injurer to the fact that they are there, but also informs them that they have been seen by the person on the other side of the pane. It is this awareness of both seeing and being seen that results in accountability. A door without a window would not provide visibility to either party and as a result erases the accountability of either party. The information and viewpoint that the window provides enacts accountability, or, as Erickson and Kellogg note (2000, p. 62): " . . . translucence stands in more generally for the power of constraints."

---

[2] Kellogg and Erickson do not explicitly reference ethnomethodologist Harold Garfinkel in their use of the term 'accountability', but I believe their notion is strongly correlated with his given the common emphasis on visibility. The parallels are especially striking in Heritage's (1984, p. 117) assessment of Garfinkelian accountability: "With respect to the production of normatively appropriate conduct, all that is required is that the actors have, and attribute to one another, a reflexive awareness of the normative accountability of their actions. For actors who, under these conditions, calculate the consequences of their actions in reflexively transforming the circumstances and the relationships in which they find themselves, will routinely find that their interests are well served by normatively appropriate conduct. With respect to the anarchy of interests, the choice is not between normatively organized co-operative conduct and the disorganized pursuit of interests. *Rather, normative accountability is the 'grid' by reference to which whatever(it) is done will become visible and assessable. And, subject to this condition of visible accountability, conduct undertaken for whatever objectives will tend to become designed and shaped responsively to the constraints imposed by this visibility* (cf. Mills, 1940; Skinner, 1978: xii-xiii). In this sense, normative accountability can best be viewed as organizing, channeling, and, in a sense, 'domesticating' the ways in which interests may be realized." {Emphasis added}

These researchers take pains to avoid the prescription of a panoptical system where one's feelings of accountability are borne from repression instead of being willingly adopted as a social norm. Their prescription for social translucence seeks only a window-sized gaze onto the conversations and behaviors of others. Yet this window must be more than a controlled screen, which presents only that view that the observed mandates. For example, Babble allowed users to select the color of the dot that represented them within the system, but they could not control the drift toward the outer edge of the conversation circle that indicated their inactivity. Babble users could also cordon off comments to certain chat spaces, but, once made, comments were persistent and available for viewing by other members of community. In keeping with social systems in the real world, Kellogg and Erickson argued that designs for socially-translucent systems should allow for selective elements of visible self-presentation (Goffman 1959), but not the complete control of a metaphorical solid door (i.e., which is the case for some profile-based social networking sites). It is this balance of visibility and privacy that the authors suggested would enable trust to take shape in the form of collaborative accountability.

RESEARCH STUDY

Twitter as a Window

My reflections on the topic of social translucence derive from a larger study that seeks to understand how location is represented in the microblog posts of both Twitter and Jaiku[3] users. Here I am using data that consists of the total posts (N=1145) produced by ten Twitter subjects over a four-week period. Twitter posts are unique in that they can only be 140 characters or less, although they can incorporate forms of direct address (i.e., @username) or URLS. Although authoring a Twitter post is easily done from one's own Twitter webpage, there are numerous third-party tools that offer the ability to make posts online as well as from mobile devices. Data collection was done by making screen captures of each subject's Twitter webpage (the main clearinghouse for all forms of input) every two or three days over the observed time period. [Figure 1 provides a sample view of an individual's Twitter webpage and Figure 2 offers a close up of a sample post.]

---

[3] Jaiku (http://jaiku.com/) is a Finnish microblogging tool that was purchased by Google in October 2007. Unlike Twitter, it has a dedicated mobile application that allows users to incorporate their synchronous physical location as a tag in their microblog posts.

Figure 1. The web-page view of an individual's Twitter stream. Demographic information about the user is on the top right, and the number and thumbnails of the people he is following (truncated here) are on the bottom right.

Figure 2. A close-up view of a sample Twitter posting picked randomly from the public timeline on June 17, 2008 at approximately 1:15pm PST. The bold blue name at the beginning is the username of the poster, which is followed by the body of the message, or 'tweet' as it is known colloquially. The phrase 'less than 5 seconds ago' indicates time relative to the time of viewing; a proper date and time will replace this phrase after 24 hours.

Regarding the demographics of the subject sample, six of the ten are male and four are female. All are experienced Twitter users. The median age of the group is 37, with subjects ranging in birth year from 1966 to 1981. Activity definitely varied among the ten subjects—the most active made 272 posts during the four weeks and the least active made only nine.

There are two subgroups of note within the sample. The first subgroup is a pair of permanent, co-located colleagues at the same firm—one a man (Subject G) with 132 posts and the other a woman (Subject F) with 110 posts. The second subgroup, delineated functionally, is comprised of six freelancers and/or distributed workers: the top three most active (H = 214 posts; I = 263 posts; J = 272 posts) and the least three most active subjects (A = 9 posts; B = 17 posts; C = 38 posts) all work from home or in some temporary project capacity. Within this group of six there are existing ties between three dyads (A/I; B/J; C/H), all of which are geographically defined and one of which is a pair of colleagues at the same firm (one project (G), one permanent but offsite (A)). The two co-located colleagues also form a clique with two local freelancers (G/F/C/H).

It is true that all of these pairings are the product of my modified snowball sampling methodology (Granovetter 1976), yet what is more significant is their ability—short of a crisply defined community boundary—to provide intelligibility toward some of the social context in which these posts take place. This fact is important because there is no 'community' as such in Twitter like the Babble user group described by Kellogg and Erickson. Instead, an individual Twitter user has a set of 'followers' who voluntarily subscribe to their feed. Thus, it is highly atypical for any two individuals to interact in exactly the same audience or community. Notably, however, the posts from each of the subjects in this study are wholly public and can be found easily using either Google's search engine and the user's name or the standard URL convention: http://twitter.com/username.

Visibility and Awareness in 140 Characters or Less

Visibility and awareness work together in social translucence by providing a view on others while simultaneously putting oneself on view. My analysis of the Twitter data suggests that there are certain obvious ways that Twitter showcases people's thoughts and behaviors, but less obvious ways in which interlocutors signal their awareness of being noticed.

***Networks** –* One type of visibility that Twitter fosters concerns the overlapping networks in which individuals and their contacts are interacting. The design of the individual Twitter webpage [see Figure 1] displays the group that that person is following, which upon quick glance indicates their selectivity (i.e., how many incoming messages they care to receive) and potential commitment to the service (i.e., following fewer people may indicate only marginal Twitter use). On closer analysis, an observer can also see potential overlaps with those individuals they follow; these can be recognized by noting familiar icons among the set displayed. Furthermore, the nature of the community in which an individual Twitter user is engaged can often be assessed by counting the ratio of faces to icons on display. While it is not unheard of for individuals to use graphic icons as personal representations, it is much less common than corporate services (e.g., BarackObama, digitalnatives) that act like individual users. On the side of awareness, Twitter users know that, as a user of the service, their networks will also be fully on display[4]. The icons and count of their followers similarly infer a persona and a community to those who seek out or follow them.

Social groups also reveal themselves within Twitter postings. Network ties across organizational and social boundaries become evident via Twitter's method of commenting on posts, which illuminates both the porosity of social boundaries as well as the use of Twitter by freelancers to maintain ties with relevant knowledge communities. An example from Subject H shows how others might identify these network ties, namely in the form of direct address by the original poster. This subject's conversation about a piece of software called Textpattern [see Figure 3, read bottom up] begins with a post at 12:19PM.

---

[4] Twitter does provide the option of keeping one's posts private, however statistics suggest that only 10-15% of total users use this feature (http://twitterfacts.blogspot.com/2008/01/number-of-twitter-users.html).

Figure 3. Excerpt from Subject G's Twitter stream that reveals members of her social network by way of her replies to them using the '@username' syntax.

The initial statement elicits at least two responses, which are indicated by the replies she makes at 12:37PM and 1:11PM. Those individuals who subscribe to Subject H's feed—her followers—will only see one side of any conversation unless they are also subscribers to all parties involved, in this case to *hrheingold* and *mja*'s feed as well as to Subject H's feed. Since this level of coverage is difficult for any one user to achieve in a system with over 1 million subscribers[5], the effect is often, as another subject remarked during an interview, like witnessing a conversation happening between people located at either end of a loud, crowded bar. You may catch a snippet here and there, but overall one is left to piece together the gist of the conversation by other means, if at all. What is revealed in this exchange more apparently is the fact that Subject H is on conversant terms with *hrheingold* and *mja*, she knows something about software and typography, and she is fairly attuned to the minute-by-minute occurrences in her Twitter feed. Her act of responding to those who have responded to her acknowledges her conception of Twitter as an active conversation space, one in which she expects—or at least welcomes—feedback. She is aware that her posts are not made within a social vacuum at the same time that she visibly notes, by way of @ syntax, the same of those people whose streams she follows.

Content – In addition to the display of one's network, Twitter feeds also shed light on matters of content, potentially personal or private in nature. As followers' comments become visible within conversation streams, they enable front seat access to what might otherwise have been a circumscribed chat at the water cooler. The public nature of many of these dyadic conversations makes knowledge visible that might otherwise have been hidden. A few posts from Subject G's data illustrate a form of this 'private in public' style well. He directs the following comment to one member of his network: "track down @sunir at barcampnyc and say hi for me." At another point he says to another friend: "thanks for the pointer to Moody – listening a lovely shade of green now." There is no hint of impropriety here via inappropriately revealed intimacies or other sensitive matters, but typically these

---

[5] The technology blogger Michael Arrington reported on April 29,2008 that Twitter had 1+ million users, 200,000 active users per week, and 3 million Twitter messages posted per day
(http://www.techcrunch.com/2008/04/29/end-of-speculation-the-real-twitter-usage-numbers/).

small forms of social touch are not on overt public display. In Twitter, they are like whispers amplified over a loudspeaker. This private visibility reveals something about Subject G's sensibilities and interests in a way that is usually only revealed to those with close, personal access.

A separate, non-dialogic form of revelation is captured in iconic Twitter posts that follow the founders' directive to answer the question "What are you doing?" Few people follow these instructions to the letter, as can already be seen in the sample data, but when the tool is used for typical one-to-many broadcasting purposes, a second form of private in public visibility is tendered. In this way, Twitter closely mirrors the chatroom affordances of Babble. Twitter, however, makes it very easy to consume a person's missives both as single shoutouts and as a series. Subject J is in the habit of revealing her inner thoughts and opinions in her Twitter stream, particularly late at night when prompted by watching television or surfing the Internet. [A sample excerpt is highlighted in Figure 4.] These broadcasts often take the effect of running commentary and they are rarely interrupted by feedback, which works to amplify their broadcast nature.

Figure 4. Excerpt from Subject J's Twitter stream that showcases 'private in public' broadcasting style.

In the 50 minute time span captured in the 7 posts here, we are witness to comments about Subject J's personal activities (i.e., "learning joomla," "playing wishfest"), critical opinions (i.e., Lewis Black, Comcast), and budding praise for an unnamed comic. Not only are these diary-like entries articulated and uploaded for all who wish to read them (like other forms of blogging), but they are happening in real time. If I am a follower of Subject J's feed and happen to be online at one o'clock in the morning, I might tune in to whichever channel I presume is airing comedy on television at that hour and watch along, knowing that I have the added benefit of her occasional insights. In other words, with Twitter we can be privy to Subject J's private thoughts in a new form of virtualized situ.

It is clear to see how these two forms of 'private in public' behavior—one dyadic, the other monophonic—enable new forms of visibility, but it is less clear whether they simultaneously foster awareness of that visibility. Both of the communicative behaviors described above tend not to engender feedback; one is a directed message within the imaginary confines of a dyadic exchange while the other is an open, one-way transmission to an imaginary community or public. Should the first of these two types morph into a conversation, the originator receives confirmation that their message has been received, but little else. Moreover, the strong comparison in form between Twitter's brief missives and the vernacular of instant messaging easily muddles Twitter's public nature and may facilitate unintentional visibility of which the sender rarely ever becomes aware. Like Babble, Twitter posts are persistent, so delayed awareness could be borne or a review of one's posting activity. Yet, unlike Babble, there is little incentive to look back in Twitter; by their nature Twitter posts are strongly anchored in the present moment.

Context – The last interrelation of Twitter visibility and awareness involves time and space. As the typical workday now extends beyond fixed business hours and into locations other the office, round-the-clock and on location Twitter posts can reveal controlled glimpses into the larger context in which an individual's work and personal life takes place. There are three noteworthy examples of these glimpses in my data. The first emphasizes movement. Subject G, a commuter, often sends broadcast posts out that showcase his walks and bus rides. Examples include: "on my way to the bus stop," "riding the interurban," and "skiddeth bus and sloppeth us." Like all Twitter posts, these are time-stamped so family and colleague recipients can not only imagine Subject G en route but can also predict when he will likely arrive at home or in the office.

Sometimes Subject G also goes further afield, and this shifts the visibility away from local micro-movements around town toward place-based commentary on new locations. In Figure 5, we are given the briefest peek (in three posts over the course of 7 hours or so) at a trip Subject G takes one Saturday afternoon to a nearby college town.

back from the ag school, ransomed my car from the over-helpful campus police who kindly towed it for me 08 07 PM March 15, 2008 from web

touring the Michigan agricultural College. watching for cows 02 39 PM March 15, 2008 from web

in L:Lansing, MI after a nice drive through the agricultural country side 12 50 PM March 15, 2008 from web
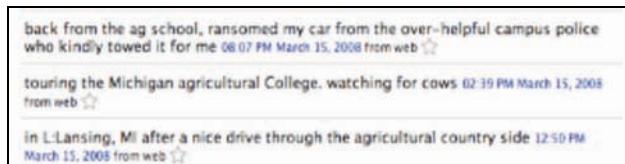
Figure 5. Excerpt from Subject G's Twitter stream that showcases haiku-style travelogue.

The first post at 12:50 pm makes note of his current location and shares a bit about his journey. The second post, about 2 hours later at 2:39pm, hints briefly at the purpose of Subject G's trip and slyly winks to any Michiganders in the audience who will know that "the Michigan agricultural College" is Michigan State University. Finally, he concludes with a post at 8:07pm in which we learn that he is back home (Ann Arbor, for people in his close

community) despite his car having been towed by MSU campus police. These Twitter posts produce a haiku-like travel report with side comments that his followers can use to vicariously travel along—and in only 39 words. Not only is this a novel form of visibility for its continuity across shifting locations, it is also a noteworthy for the fact that it is voluntarily proffered during a time when communications among work colleagues are typically dormant.

My data also suggest a third way in which Twitter renders users' contexts visible, namely in situations where individuals are in attendance at events of interest to colleagues and thus act as scouts or color commentators for the benefit of those not present. One interviewee spoke extensively about this activity as an intentional strategy, and I saw it clearly in several examples in posts I had collected. Subject H attended the technology portion of the South By Southwest (SXSW) conference in March and made ten to twenty posts per day about her activities there, both professional and social. Subject I attended a lecture by media analyst, Bob Garfield, and blogged the event in 40 posts over 86 minutes. He included direct quotes, opinions, links and direct messages during that time, so while there was an effort to act as an on-the-scene conduit, Subject I's strategy did not preclude all the other types of communications he would engage in during that time.

In this sense, this style of 'proxy reporting' is more akin to peering through a door that is ajar than fully opening it. Nevertheless, proxy visibility provides valuable data for those who cannot be present while simultaneously extending the reach—like the tentacles of an octopus—of the follower community. As in the broadcasts described in the preceding section, there appears to be an assumed audience on the part of the authors of these primarily one-way posts. Awareness then is more sensed than empirically confirmed, though we see that sometimes feedback is received and responded to in the form of a clarifying inquiry from a follower. Aside from this mechanism there is little to reflect a poster's activities back on themselves to remind them of the social context in which they are ultimately interacting.

In sum, Twitter enables new forms of social and contextual visibility to a greater degree than it fosters awareness of that visibility. The question remains open to empirical confirmation as to whether individuals reflect back on their own visibility when afforded a detailed sightline on the thoughts and activities of fellow interlocutors, or whether the conception of audience, coupled with an incoming feed from a separate group an individual chooses to follow, combines to evoke the countervailing forces of visibility and awareness that form the foundation of social translucence and, hence, "the building blocks of social interaction" (Erickson and Kellogg 2000, p. 62).

DISCUSSION

Preliminary analysis suggests that awareness is not well supported in the use of Twitter, while visibility may in some ways be extended over other forms of computer-mediated communication. Does this challenge our hypothesis of Twitter as a socially translucent

technology? Absolutely, yes, but only to the extent that it raises a question regarding the evocation of accountable feelings among engaged community members. Clearly, Twitter does not follow the model for accountability raised in the discussion of Babble by researchers Erickson and Kellogg. However, my analysis suggests the presence of at least two alternate means of establishing awareness that appear to yield a sense of accountability among Twitter participants despite their dissimilarity to earlier research, as well as their indirect and temporary natures. I discuss each awareness alternative in turn and conclude with thoughts regarding how our conception of social translucence should be renegotiated given this new evidence.

First, however, a brief word of clarification regarding what is meant by 'community.' Many Twitter users believe themselves to be communicating within a community that they identify by concatenating the set of individuals whom they have chosen to receive posts from—their followees—with the set of individuals who receive their posts—their followers. In truth, however, no two Twitter users have the exact same set of followers and followees, though for many there is a large percentage of overlap. It is in this overlap that the strong feelings of social connection are most often articulated; yet, curiously, of the ten subjects in my study, the average number of people that each subject follows is 283 and the average number of followers per subject is 460. [Table 1 breaks down these numbers per subject.] These large numbers extend well beyond Dunbar's number of 150, and, as such, suggest that there may be two parallel audiences operating simultaneously within most individual's Twitter community. On one level is a core group—perhaps colleagues, friends or neighbors—and, on another level, is a more peripheral community—people from the past, friends of friends, people met at conferences, etc. This secondary community is made visible by their attendant icons and occasional posts on the Twitter web page, but far less often is there a one-to-one interaction to suggest evidence of mutual awareness. Yet, I would contend, awareness of both communities must come into play to engender accountability.

TABLE 1 Number of followers each subject has and number of individuals each subject is following.

Subject	# Following	# Followers
Subject A	141	164
Subject B	126	422
Subject C	68	113
Subject D	482	678
Subject E	146	180
Subject F	828	1152
Subject G	345	439
Subject H	287	565
Subject I	267	542
Subject J	136	340
Average (N=10)	**283**	**460**

Indirect Awareness

Ample evidence within my data points to the fact that awareness can be evoked via Twitter, just not always in a direct manner. Subject G, in responding to my questioning during our interview, showcases an example of this indirect awareness. He reminds us that the practice of communication with Twitter exists in a larger ecosystem, one where missives initially channeled via one medium can be responded to via another.

> *Interviewer: How do you know anyone is out there on your Twitters? Is it mostly because people are making comments back?*
>
> *Subject G: People are making comments back, people mention it in the office, things get done as a result of it. I call people as a result of it. People call me, I get phone calls for Twitters that I do.*
>
> *Interviewer: Give me an example.*
>
> *Subject G: I Twittered that I was picking raspberries in a park and I'm at the park. . . So, I got a call from [name of friend] who was in Plymouth at the time saying, "Are you at the park nearby because I'm in Plymouth."*

Twitter here is a visible trigger for a host of possible awareness-oriented response mechanisms, from the completion of a work task to a physical meet up to a phone call. When G receives a phone call because of a Twitter post he makes, this act raises his awareness that his messages are not falling on deaf ears. In turn, he is less inclined to falsify or make irresponsible posts in subsequent communications. Receiving confirmation that he can see just as he can be seen—or, stated otherwise, knowing that his Twitter posts will, in many cases, be acted upon—helps to establish his sense of being accountable to those who may be attending to his posts. Twitter's mechanism of visibility is therefore made accountable to G by any one of multiple indirect means for his followers to indicate their awareness. As such, it is perhaps improper to designate Twitter alone as a socially translucent system, but rather to understand that it plays a strong supporting role within a potentially translucent ecosystem of interconnected communication media. As Twitter enables or fosters the awareness necessary for accountability, it need not be the primarily channel for it.

Awareness by Incident

Another example showcases the power of circumstance to signal mutual awareness within Twitter. Unlike the previous example, awareness by incident confines the dynamic of awareness within Twitter alone; but similar to the previous example, also suggests the accountability engendered need not be considered strictly as a property of the technology, but rather as a technology in use within a particular social situation. Microblogging during a critical incident, such as inclement weather, appears to bring together individuals across community levels (i.e., perceived close and extended) out of a common need for timely

information exchange. Subject H shared with me the way that her Twitter contacts maintained active ties with one another last summer during a tornado warning in Michigan. Within this critical incident, Twitter became a real-time forum to make reports from respective outposts both to signal well being and to check in with others, despite varying levels of intimacy. Within a 50 minute window, 25 messages surfaced among the members of a self-organized group tied together by geography. The following post began the stream, signaling P1's concern, their location, and their awareness that other members of his network might be affected,

> P1: *"Tornado sirens in Kerrytown – checking now. Is this real?"* (July 19, 3:44pm)

It was followed by a flurry of activity by three others who helped to stake out the situation:

> P2: *"@P1 is it a test or no?"* (3:46 PM July 19, 2007)

> P3: *"no, not a test, real warning. Salem/Dixboro area very close to A2 tornado / thunderstorm warning through 4:15 PM"* (3:47 PM July 19, 2007)

> P4: *"@P2 @P1 Tornado Warning Dixboro 9 mi NE of A2"* (3:47 PM July 19, 2007)

> P1: *"tornado sighted in ann Arbor take shelter immediately"* (3:48 PM July 19, 2007)

Some 46 minutes and much rain later, the thread concludes with a humorous acknowledgement by Subject H that she is well and that the weather in her location is clear.

> *"So what's a little tornado between friends? Weather hysteria-o-rama. Skies looking clear over Manchester. Any more last minute CB riders?"* (4:34 PM July 19, 2007)

By organizing via Twitter, these individuals were also guaranteeing that they were being seen and noted by the other participants, who, presumably, would alert the rescue squad if anyone's participation dropped off. The same type of overt awareness was explained by another interviewee, a Minneapolis, Minnesota resident, who mentioned how Twitter facilitated unbidden awareness of friends when a bridge collapsed in August 2007. He said, " . . . what was great for me is all the people that I know locally, the first thing they did was do a little tweet that says I'm not there. I'm okay." Thus, while the everyday Twitter post often engenders few cues of receipt, in critical incidents and sometimes by indirect means, Twitter can be quite facilitative of the awareness that forms the foundation of social translucence.

Does the indirection and temporary nature of the awareness afforded by Twitter alter the accountability that it produced? Unfortunately a definitive conclusion cannot be proffered without further ethnographic research. It is possible to surmise one of two possibilities, however. It could be that Twitter leads to lower levels of accountability due to

the asystematic glimpses it provides. On the other hand, randomized awareness could also heighten a sense of accountability because of its inherent unpredictability. Preliminarily, then, we can claim that Twitter affords fosters at least a peripheral social translucence, if not social translucence in total. Twitter, and the communication ecosystem in which it is often used, does provides a window in a door, but the view can sometimes be obstructed or opaque.

CONCLUSION

Kellogg and Erickson's introduction of the concept of social translucence has profitably impacted the study of collaborative technologies and helped scholars and practitioners alike to design better tools. I choose to apply the lens of social translucence to the microblogging tool Twitter with data gathered from 10 subjects over a 4-week period. Early conclusions support the argument that Twitter enables visibility among interlocutors, but shows simultaneously that its capacity for enabling awareness is less robust. As such, accountability among interlocutors is present, but fragile. In conclusion, we can state preliminarily that a claim for social translucence can be made, but would be more accurately described as peripheral, not total.

While the implications of this work may be generative for future investigations in this area, it must be acknowledged that they derive from a small data sample and build on existing, but limited, literatures. Our future understanding of translucence requires additional rigorous research by scholars interested in online communities, distance collaboration, and ubiquitous computing. I would enjoin those interested in patterns of social organization to continue pursuing the conceptions of community, accountability and translucence ethnographically. It is only with grounded knowledge that we will begin to comprehensively know why public environments feel communal, what the boundaries of private information are and in which contexts[6], and how we can continue to refine the notion of translucence to engender collaborative norms and practices.

REFERENCES

Blau, Peter M.
1955   *Dynamics of Bureaucracy.* Chicago, IL: University of Chicago Press.

Bradner, Erin, Wendy A. Kellogg, and Thomas Erickson

---

[6] Synchronous information about one's personal whereabouts—even to friends—appears to cross the line for many, but we have only begun to investigate how this situations differs from other, seemingly intimate situations that are readily shared online.

1999 *The Adoption and Use of 'BABBLE': A Field Study of Chat in the Workplace.* Sixth European Conference on Computer-Supported Cooperative Work (ECSCW'99), Copenhagen, Denmark, 1999, pp. 139-158. Kluwer Academic Publishers.

Cogdill, Sharon, et al.
2001 *Backchannel: Whispering in Digital Conversation.* 34th Hawaii International Conference on Systems Sciences (HICSS-34), Maui, Hawaii, 2001. Vol. 34, 4, pp. 4033. IEEE Computer Society.

DiMicco, Joan Morris, and David R. Millen
2007 *Identity Management: Multiple Presentations of Self in Facebook.* 2007 International ACM Conference on Supporting Group Work (GROUP'07), Sanibel Island, FL, 2007, pp. 383-386. ACM.

Dourish, Paul, and Sara Bly
1992 Portholes: Supporting Awareness in a Distributed Work Group. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, pp. 541-547.

Erickson, Thomas, et al.
2002 *Social Translucence: Designing Social Infrastructures that Make Collective Activity Visible.* Communications of the ACM 45(4), pp. 40-44.

Erickson, Thomas, and Wendy A. Kellogg
2000 Social Translucence: An Approach to Designing Systems that Support Social Processes. ACM *Transactions on Computer-Human Interaction* 7(1): 59-83.

—
2003 *Social Translucence: Using Minimalist Visualizations of Social Activity to Support Collective Interaction. In* Designing Information Spaces: The Social Navigation Approach. K. Hook, D. Benyon, and A.J. Munro, eds., Springer, pp. 17-42.

Goffman, Erving
1959 *Presentation of Self in Everyday Life.* New York: Anchor Books.

Granovetter, Mark
1976 Network Sampling: Some First Steps. *American Journal of Sociology* 81(6): 1287-1303.

Heritage, John
1984 *Garfinkel and Ethnomethodology.* Cambridge, UK: Polity Press.

Jackson, Anne, JoAnne Yates, and Wanda J. Orlikowski
2007 *Corporate Blogging: Building Community through Persistent Digital Talk.* 40th Hawaii International Conference on System Sciences (HICSS-40), 2007. IEEE.

Kellogg, Wendy A., and Thomas Erickson
2002   *Social Translucence, Collective Awareness, and the Emergence of Place.* pp. 1-6. Yorktown
            Heights, NY: IBM T. J. Watson Research Center.

Roy, Donald F.
1959   "Banana Time": Job Satisfaction and Informal Interaction. *Human Organization* 18,
            pp.158-168.

Selznick, Philip
1957   *Leadership in Administration.* Berkeley, CA: University of California Press.

Sproull, Lee, and Sara Kiesler
1986   Reducing Social Context Cues: Electronic Mail in Organizational Communications.
            Management Science 32(11): 1492-1512.

Contact Lists and Youth

Matthew Yapchaian
Intel Research, Intel

This paper explores the nature of networked contact lists in an emerging new media ecology as they relate to a population of 10 American pre-teens and teens (9-15). Mobile, gaming, and Web 2.0 services are contributing to a shift in the role of the contact list from a static visualization of a database to an active communication tool and the site of sociality. We draw in material from ethnographic research illustrating contact lists as dynamic sites for social activity, existing across multiple media channels, which evolve in time with an individual user. We then describe how contact list use by American youth (9 - 15) produces new understandings of accessibility, sociality, and visibility within the scope of personal relationships, mobility, and play in everyday life. We conclude with how we are informing corporate strategy on youth marketing and new product development.

Introduction: School, The Center Of The World

American youth are members of a generation born into a new media ecology where contact lists are crucial components of the everyday media experience. Participants (9-15) in our study frequently used contact lists in an effort to manage personal relationships across social, temporal, geographical, and technological domains. A significant consequence of contact list use by pre-teens and teens is the development of new paradigms for social interaction that contest current norms. We will show how participants in our study optimized their online and offline social relationships through a novel and resourceful use of contact lists.

School and extra curricular activities are serious time commitments occuring throughout the school week and weekends. School, public or private, is a unique environment that wields incredible influence over the makeup of youth social networks; school is a closed community that regularly introduces known and unknown peers from a general population to each other through a series of regular reorganization of class, grade, and extra curricular rosters. Participants in our study frequently described a relationship between encountering new peers and their use of contact lists to manage relationships. Participants stated that not sharing a class with someone, despite attending the same school and being in the same grade as each other, is a significant barrier that renders pre-teens and teens socially invisible to each other.

In addition to pre-teen and teen busyness, youth have restricted independent mobility. Our participants had few opportunities to freely move about geography without the consent of an adult. Danah Boyd (2007) suggests that the Internet is unique because "it allows teens to participate in unregulated publics while located in adult-regulated physical spaces such as homes and schools." We will describe how youth use contact lists to work around mobility limitations.

Study

This exploratory study features 10 children (6 boys, 4 girls) from 5 middle class households of 2 children each located in the Portland, Oregon region, with a minimum of 2 visits per child. All of the homes we visited had media environments featuring a range of screens and services that make up our contemporary media ecology including: television screens, cable television, DVD players, multiple video game consoles, PCs, laptops, mobile phones, and Internet access. Violent video games were not permitted in any of the homes, although several parents allowed their children to watch PG-13 and R rated films when supervised by an adult. Methods included interviews, guided demonstrations of media environments, and design exercises.

Mostly Text

Communication technologies present in the homes we visited varied; half of our participants owned a mobile phone, all participants owned networked console and handheld gaming platforms (Nintendo DS, Nintendo Wii, Xbox 360); all participants had access to the Internet through a family computer where they maintained personal email and instant messaging accounts (Lenhart, A., Madden, M., Hilton, P., 2005. Family PCs functioned as the central site for digital communication and homework; PCs enabled multi-tasking: homework in one window, an instant message client in the other - to hangout or work on an assignment together. Participants also reported that when they were bored or had nothing to do, they would instant message or text message "random stuff" to friends.

Participants unanimously agreed email was used to facilitate communication with older people (aunts, uncles, teachers) while instant messaging and text messaging (when available) were preferred technologies between peers.

> Instant messaging has become the digital communication backbone of teens' daily lives. About half of instant-messaging teens – or roughly 32% of all teens – use IM every single day. As the platforms for instant messaging programs spread to cell phones and handheld devices, teens are starting to take textual communication with them into their busy and increasingly mobile lives. IM is a staple of teens' daily Internet diet and is used for a wide array of tasks – to make plans with friends, talk about homework assignments, joke around, check in with parents...(Lenhart, A., Madden, M., Hilton, P., 2005)

Instant message, mobile, and social network application contact lists belonging to our participants reflected populations of mixed contacts with various degrees of social visibility aggregated together in single, domain-specific lists. These technologies afforded participants a wide range of flexibility with regards to content, mobility, and time.

Patricia Lange (2007) states "a media circuit is not a social network itself, but rather it supports social networks by facilitating and technically mediating social interactions among people within a network." Pre-teens and teens create media circuits when they use PC, mobile, web, and gaming technologies to manage relationships. We will describe how youth are using contact lists in novel ways to negotiate online and offline social visibility.

Circle of Friends: BFF, BF, F

| School | Online: MySpace | Activity: Soccer |
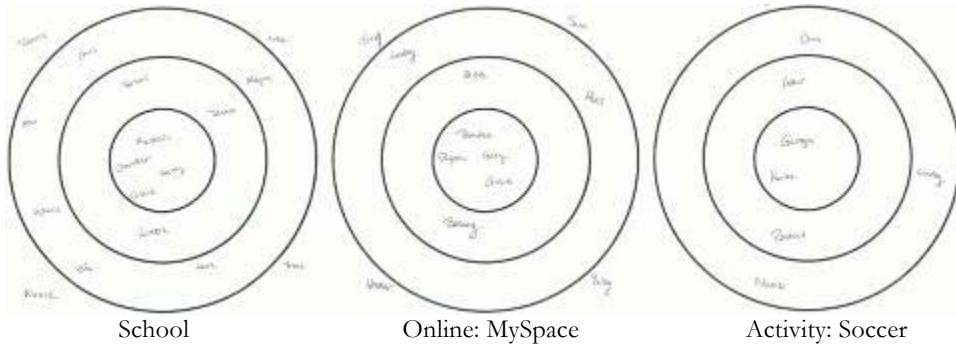
Figure 1 *Circle of Friends Exercise (Kathi, 15).*

Circle of Friends is a design exercise that visualizes each participant's social network across three important social spaces: School, where youth spend most of the day in a community of peers; An Online space of their choice; and Activity, a novel interest or specialty group each participant is affiliated with (soccer, swim, band). Each participant was asked to map their social network, relative to the social space, onto three concentric circles while imagining themselves at the center of the inner circle and label their closest friends in the center, friends not as close in the middle ring, and friends socially distant in the third ring. Maps were marked independently of each other. Following the completion of each map, we asked participants to articulate the relationships they marked on the chart

Upon completion of the Circle of Friends exercise we had three maps and testimonial evidence that provided us with opportunities to ask questions about each participant's relationships to their friends, the influence of location and environment on friendships, and technology use.

The Classroom

Participants in this study identified the school classroom as having significant impact on their social relationships. Classroom environments varied between our younger (K-6) and older (Senior High School) participants. K-6 is organized by grades and subdivided into classes with a student being assigned to a class for an entire academic year. Senior high

school is organized by year and then by subject, with each class composed of a mix of students, some including mix of students from different years.

Richard (11) describes the impact of classmates and the organization of a class on a his social network with an anecdote, "if Jeffery and I were not in the same class I'd think we would still be enemies this year. So, that [being in the same class] really helped us. This year I was disappointed to find out I didn't have any friends in my class that I already knew."

Although Richard and Jeffery are in the same grade, prior to the 2007-2008 academic year, they never shared a class together, resulting in limited social visibility and "enemy" status. Richard and Jeffery were not actual enemies; both boys were relative unknowns to each other until they were assigned the same class and became friends.

Conversations with our participants suggest that youth online and offline social networks are built on face-to-face interaction amongst peers in a classroom environment. School and extra curricular programs make up the core community of peers youth regularly interact with.

Drifting: Managing Social Visibility

Classroom seating assignments, class schedules, and extra curricular activities organize youth into temporary social clusters that place students in immediate contact with each other. Organizing and reorganizing students has a profound impact on their social network; some relationships last only for the duration of a class or sports season, while others will continue to develop beyond a specific class or sport season. In addition to social networks being used to manage current friends (Lenhart, A., Madden, M., 2007), some behavior from our participants suggest social networks may also be used to develop new relationships.

Kathi (15) echoes Richard's previous anecdote regarding the impact of classrooms on friendship as she describes four friends located in the outer ring of her school map (figure 1), "people I've only really gotten to know kinda this year, and already I'm not very, I was like close to them, like the beginning of the year, but now I don't have any classes with any of them really, so they're like drifting." Although no longer together in the same class with the classmates she identified as drifters, Kathi maintains her relationships with them through limited MySpace messaging, "talking with them occasionally...[they are] not forgotten, but not there completely." Absent from the immediacy of everyday face to face contact does not render a person invisible online.

Individuals located outside of the third circle of Kathi's school map (figure 1), in the ether of friendship, do necessarily represent individuals who drifted or are currently drifting *away* from Kathi; she used the margins to mark social status progressing from invisible to visible. Kathi describes some of the kids she met in new classes who are currently occupying this space; "the four [friends] outside of the circle should be in the [center] circle but they're not there yet because I have not really gotten to know them yet; they're people that I've met

in the past couple of weeks that are probably going to come closer in the circle but are not there yet." Kathi's description of drifting identifies visibility and invisibility as dynamic states.

Steve (12) answers "only a few", when asked how many friends from his instant message list of 120+ contacts he regularly messages. Instant messaging, unlike Facebook, MySpace, or similar platforms, does not have a public face; contacts are only visible on a local terminal and have no platform for public display. We believe not all pre-teens and teens are amassing large collections of email, instant message, mobile, and social network contacts for bragging rights; rather, they retain contacts to manage degrees of visibility as peers drift in and out of relationships.

Random Content: From Invisible to Visible

"Informal conversation creates affinity through greetings, jokes, gossip, polite inquiries, and 'chatter' of low substantive content" (Nardi, 2005). Steven describes instant message exchanges with weak ties from his school and swimming club, "you don't talk to people you don't know that well, you don't get into a detailed conversation with them, you kinda go 'hey, what's up?' then they like say, 'oh cool'; its totally random stuff, not anything that's absolutely important."

Bonnie Nardi (2005) argues that low-content informal instant messages and mobile messages are exchanged to renew bonds rather than develop new ones. Youth in our study use these exchanges to negotiate early stages of friendships, if a relationship is established, the role of instant messaging and mobile messaging shifts from relationship creation to renewal.

Figure 2. *Screen image of Kim displaying "random stuff".*

Social visibility often begins with face-to-face interaction through a classroom assignment, extra curricular activity, or a mutual friend. If initial social contact is made online, it is usually at the suggestion of a mutual friend. Introductions are followed by *random* short online exchanges. "Random", in the context of our participants' descriptions, is a synonym for low-content exchanges. Random, seemingly un-important chatter is part of the social process used to incrementally make visible otherwise invisible social connections.

Once a relationship is established, random online chatter becomes part of hanging out. "Can you help me not get bored?" asks Kim (9). "I chat about random stuff sometimes when it is with [scrolls down a chat session and points to names of friends] and we talk, we have TFKs, its homework, so we talk about it and we help each other out. This is random stuff [scrolling down a long chat that was on/off for a period of an hour]." (figure 2)

Activity (of Choice)

Circle of Friend's Activity map describes an interest unique to each participant. All of our participants identified activities located outside the bounds of their school's environment: competitive swimming, soccer, tennis, School of Rock, etc. These activities may extended individual mobility beyond local boundaries and introduce participants to new peers with a shared interest in a particular activity. Kathi traveled to California for a soccer tournament, Steve and his brother traveled within Oregon to participate in a competitive swim league. Most contacts from this category stay within the domain of the activity, we saw few contacts appearing on both the Activity map and Online map. Contacts from an extra curricular activity that were entered into instant message and mobile contact lists enabled participants to aggregate relationships distributed across multiple social and physical geographies together as a single *visual* group of friends.

Networked Games

All but one of our participants expressed an interest in networked console and PC video games. Tony (15) uses Halo 3 (Xbox 360, Xbox Live) as his preferred method of networked social interaction. Tony is a busy teen; he does well in school and is a competitive tennis player who practices tennis up to five days a week. Tony is mentally and physically exhausted following a full day of school, tennis, and homework, leaving him with little interest in instant messaging or hanging around MySpace as many of his friends do. Tony and his gaming buddies (all fiends from school) meet up in the world of Halo 3, their avatars appearing together in a single virtual world, tethering the geographically remote friends together though a shared private audio channel, where they hang out and talk as they casually shoot aliens.

Halo 3 provides a graphically rich shared social space for Tony and his friends to hangout together when they are unable to meet in-person due to their limited mobility. Although text based communication technologies are not as aesthetically pleasing as a 3D game worlds, contact lists and messaging tools also provide a channel for pre-teens and

teens to be accessible and visible to each other almost anywhere and anytime. Tony was the only participant to use a gaming platform a his primary chat channel, we think this example is important because it points to the rapid proliferation of contact lists into new spaces in our media ecology.

CONCLUSION

This paper described how a group of American pre-teens and teens used networked contact lists in novel ways to negotiate online and offline visibility. Circle of Friends was an important method for us to gain insight on the relationship between the classroom environment and youth online/offline interaction. Industry intent on targeting the youth market will need to understand that youth exist in a unique social space that informs their use of instant messaging, text messaging, and other contact list based communication technologies.

NOTE

This was part of an exploratory study conducted by ken anderson, Maria Bezaitis, and Matthew Yapchaian at Intel Research Portland, Oregon.

REFERENCES

Boyd, D.
2007   "Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life." MacArthur Foundation Series on Digital Learning – Youth, Identity, and Digital Media Volume (ed. David Buckingham). Cambridge, MA: MIT Press.

Lange, P. G.
2007   Publicly Private and Privately Public: Social networking on YouTube. Journal of Computer-Mediated Communication, 13(1), article 18. http://jcmc.indiana.edu/vol13/issue1/lange.html accessed 1 June 2008

Lenhart, Amanda
2007   Social Networking Websites and Teens: An Overview, PEW Internet and the American Life Project, January 7, 2007.

Lenhart, A., Madden, M., Hitlin, P.
2005   Teens and Technology: Youth are Leading the Transition to a Fully Wired and Mobile Nation, Pew Internet and American Life Project, July 27, 2005.

Nardi, B. A.
2005   Beyond Bandwidth: Dimensions of Connection in Interpersonal Communication. *Computer-Supported Cooperative Work*, 14:91-130.

(In)visible partners: people, algorithms, and business models in online dating

ELIZABETH F. CHURCHILL
Yahoo! Research

ELIZABETH S. GOODMAN
University of California at Berkeley, School of Information

A confluence of personal, technical and business factors renders priorities, practices, and desires visible – and invisible -- when people use online dating sites to look for partners. Based on a review of websites, interviews with dating site designer/developers, and interviews with would-be daters about their online experiences and their first dates, we offer some insights into the entanglement between daters, site implementers, and business models that is part and parcel of getting 'matched' via the Internet. We also examine the role of the website interface and match algorithms in the expression of the "real me" and the search for "the one" – and then how processes of self-presentation and partner imagination play into the planning, expectation-setting and experience of the first date. Finally, we reflect on issues raised for design and for strategic technology development. This study of online-offline encounters is an example of using detailed qualitative analyses to deliver deeper understandings of people's experiences, offering a complement to large-scale, aggregated data summaries based on website activity logs and surveys.

"I just want them to see me for who I really am."
Female online dater, aged 34.

"… there is an omission in those sites, in the regular sites. Nobody talks about sex, it's just not brought up. Or it is not allowed, and you get censored, kicked off. Which is silly."
Female online dater, aged 48.

"There is a lot of stuff we think we could do. But you know, we have to prioritize, to choose between things. There has to be a good reason…something that is good for our market, for our customers. And there's stuff that puts people off. No sense in driving people away."
Site designer, aged 32

INTRODUCTION

Romance, love and sex are big business. Unlike many other forms of online socializing, where business models, or what is known as "monetization," are unclear (Lunn, 2008), servicing the pursuit of sex, romance and partnership has always been profitable.

Today, online dating is far and away the most socially acceptable face of coupling services. By 2006, sixteen million Americans had used an online dating website (Madden and Lenhart, 2006). Nielsen Online estimates that 25.8 million people visited online dating sites from the United States between February 2007 and 2008, with 18.9 million people visiting

from other countries it tracks in the European Union[1] (Neilsen, 2008). The dating/matchmaking industry in the United States has been valued at $1 billion per year, with online activities (including subscription fees and activities such as "winking", or sending virtual gifts) making up 50% of that total (US Dating Services Market, 2006).

Yet there are signs that the industry is in trouble. Some have been suggesting growth slowdown since 2005 (Pasha, 2005). More recently, analysts point to "saturation" of the market, and warn that additional market growth will require the design of new for-pay services for existing customers, and the recruitment of new types of customers (Elliott, 2007). This study emerges from a partnership between Yahoo! Research and Yahoo! Personals aimed at identifying strategic directions for growth through a better understanding the relationship between online dating, in-person meetings, and the website that lies between them.

Online dating has recently emerged as a concern not just in industry but also in academia. Recent research has focused predominantly on behavior online, falling into two main areas: *attractiveness,* and its counterpart, *self-presentation.*

Attractiveness Studies of attractiveness identify qualities desirable in mates, and the representation of those qualities online as a starting point for understanding how people pick mates – which is, after all, the goal of online dating. Hitsch et al (2006) derived patterns of preference in the logged communication activities of 22,000 users of an online dating service using economic "marriage market" models. More recently, Fiore and colleagues (2008) used online dating profiles to quantitatively model predictive relationships between perceived attractiveness of individual profile elements (i.e., images and free text) and the whole profile.

Self-presentation Creating a self-portrait in the form of a user profile is one of the first actions an online dater must take. These profiles, which the dater can alter anytime, are a rich site for inquiry. However, there is little published work on the process of making and revising profiles. One notable exception is Ellison, Heino, and Gibbs' (2006) extensive interviews with online daters. They use online dating as a lens on computer-mediated processes of interpersonal communication and impression management. Perhaps in response to widespread stories of dishonesty in online self-description (for early research see Donath, 1998), some researchers have estimated the actual extent of dishonesty in self-presentation (Brym and Lenton, 2001; Hitsch et al, 2006; Hancock et al, 2007), its effects on relationships (Gibbs et al, 2006), and how online daters enact "honesty" itself (Ellison et al, 2006).

The literature of attraction and self-presentation in online dating is mostly quantitative. It leverages the large number of actual and potential dating service participants and substantial amounts of logged activity data. As well, most of the research seems to conceive of dating as a "marriage market," where online communication tools operate as more or less

---

[1] The other countries tracked include Germany (5.6 million), France (4.7 million), United Kingdom (3.6 million), Italy (2.7 million), and Spain (2.3 million).

effective instrumentalist connectors, facilitators of a commodity exchange in which people strive to sell themselves to others by listing their own winning qualities (Illouz, 2007). None of these studies treat the online dating service itself as an actor that shapes how people interact online and what they expectat from the first in-person meeting and beyond. Closest to this kind of analysis are Jones and Ortleib's (2006) critique of profiles as lacking support for the creation of an online, personal 'place' for social action with others, and the work of Frost, Norton and Ariely (2006) who suggest use of a virtual environment for first "dates" online.

Embodiment Unlike pornography and other forms of remote sexual stimulation such as 'teledildonics,' seeking romantic partners online generally requires a move from mediated to face-to-face interactions. Hardey (2002) and Illouz (2007) relate conventional actions of 'online dating' such as looking at and creating profiles, to characteristics of attraction, attractiveness and self-presentation in everyday (non-dating) life. These analyses claim that online interactions cannot – and indeed should not – be divorced from cultural and political aspects of everyday life. Our own work documents how date planning, location selection, route planning and physical wayfinding to the first date can modulate assessments of the relative attractiveness of the other (Goodman and Churchill, 2007).

SERVICES AND PARTNERS IN ONLINE DATING

Our work focuses on the design of satisfying and profitable services "along the way" to finding the perfect mate, and as part of this on understanding the role of a site or service in the emotional experience of daters (including hope, excitement, anxiety and disappointment). With the exception of Frost, Norton and Ariely (2006) and Jones and Ortleib (2006), we found little previous work that explicitly addressed possibilities for new applications, services or business models. Therefore, our work, and this paper, differs in both subject and method while drawing on other work in self-presentation. We have used interviews and observation to understand the work of profile generation and interpretation *and* the business processes of customer targeting and market segmentation. Our interest is in identifying some points of disjuncture between the expectations and actions of the different stakeholders or partners in the process of finding a matched mate. In particular, we address the relationship between corporate design decisions and daters' workarounds for revealing desires and establishing romantic compatibility.

Study Details

We carried out semi-structured interviews with three site designers/developers (from two different online dating sites), a dating site product manager and with online daters. Following a screening survey of 200 potential interviewees, we interviewed 22 current and past online daters; interviews took place between January and July 2007. All our interviewees reside in California's Bay Area and all are interested in finding long-term partners, rather than short term "hook-ups" and/or one-night stands. We selected daters for diversity of experience, not for statistical resemblance to the larger population of online daters. Our

sample was gender-balanced, and included a range of income levels – from a substitute teacher to a financial analyst. Four of our sample considered themselves "highly technical" and "computer "savvy"; all felt "very comfortable" using the Internet. Our interview sample was largely white, with few extremes of either wealth or poverty. All our interviewees considered themselves culturally American. The participants' median age was 37, making them unusual: only 11% of Americans aged 30–39 have dated online (Madden and Lenhart, 2006). However, we view this diversion from the statistical norm positively. Given the decreasing stigma of online dating and the increase in divorce, there is likely to be an increasing number of 30+ daters online in years to come.

Our interviews were conversational; our interview protocol semi-structured. All interviews were audio and/or video recorded. We asked developer/designers about design choices: the development and implementation of recommendation algorithms, the design of profile pages and other parts of the website. We also discussed business roadmaps and customer service issues of satisfaction and safety. We asked daters how they began online dating, their participation within and activity on online dating sites, and how they moved from online communication to in-person contact — including aligning schedules, selecting locations to meet, navigating unfamiliar neighborhoods, and self-presentation in person. By meeting with daters mostly in their homes, we got an intimate perspective on the spaces in which they browsed profiles, answered emails, and dressed themselves for meetings. Alternately, we tried to meet in the type of locations they might choose for first dates. In particular, we collected anecdotes of dates, with a focus on the embodied experience of romantic mobility: distance traveled, modes of transport, navigation technologies and techniques, and assessments of meeting places. We shadowed one dater as she prepared for a first date, and then interviewed her on her return.

Findings: Practicalities, practices and consequences of visibility and invisibility

Invisible work and managed emotions The rhetoric of "sign up and find love" promoted by most dating sites in their advertising and branding renders invisible the practical and emotional work of dating (see Figure 1). A typical round of dating activities might look like this: selecting a promising site, filling out (perhaps iteratively editing) a profile form, conducting mediated conversations (through IM, email, on the phone), location and activity planning (often including the sharing of digital resources), preparing for the date (including making clothing purchases and selections), getting to the date (often requiring careful scheduling and traveling), meeting and managing the in-person conduct, leavetaking, and a decision as to how one should (or should not) follow-up.

> I come home from work and the dating work starts. Nobody told me it was going to be this much work! It all looked so easy when I started. (Heterosexual female dater, aged 34.)

Figure 1. Front pages of three online dating sites: one for a general population, one specializing in horse lovers and one specializing in those who are interested in a 'green' lifestyle

All interviewed had used more than one dating site, compounding their efforts. Further, contrary to the advertised smooth linear move from profile to selection to happiness, people reported cycles of excitement, anxiety, disappointment and cynicism. Most interviewees reported periods of active partner seeking followed by "not really bothering", "dropping the subscription", "being in stealth mode", "making my profile invisible" and "turning the profile off." Daters also felt they needed to effect a detached "front," by actively hiding emotions (anxiety or excitement) from potential partners in mediated and during first dates.

> You don't want to sound too keen. That puts people off. Makes you
> seem desperate. (Heterosexual female dater, aged 42)

Visualizing the self Decisions to meet in person usually rely on what is visible through the profile and on mediated conversations prior to meetings. A plethora of books and websites aim to teach dating profile literacy, advising daters on how to appear interesting and attractive to others online (e.g., Katz, 2003; Silverstein and Laskey, 2004). All our interviewees talked about constructing profiles to "send the right message" or attract the "right" responses. Profiles are games of selective visibility: to be noticed by the "right"

people, our interviewees had to write profiles with potential algorithmic "matches" in mind while risking encounters with the "wrong" people. The technology, and the business model are actively involved in the creation and the parsing of profiles, and thus in self-presentation online. People learned to craft profiles within certain genres, attempting to appear distinctive *but not deviant* in the context of specific audiences and sites. Profiles thus required the creation of 'factions' – part fact, part fiction – tailored to particular genres and norms.

However, such tailoring is related to deception. Our interviewees found nuances in profile creation and deception that differ from the simple differentiation of good "truth" and bad "lies" upon which much previous research relies. Conscious misrepresentation – such as misleading photographs, and textual lies about age, physical appearance or favorite pastimes – is just one part of a spectrum of 'dishonest' practices. Such intentional deception was often explained as a 'foot in the door' belief: "once they meet me, I am sure they will overlook these things, see the real me" (Gay male dater, aged 49, describing the attitude of a date who had lied to him). However, beliefs about matching algorithms could also motivate inaccuracies. Believing that a dating site "unfairly" discriminated against people over 50, one older woman misstated her age to ensure visibility in search results. We also saw acceptance of misrepresentation if the qualities at stake seemed *mutable* and as such inconsequential.

> I don't smile, and I don't wear my glasses [on profile pictures]. These things are changeable. You can fix those things. I could change those. (Heterosexual female dater, aged 48)

Yet concealing those "changeable" qualities requires special efforts, and can be stressful:

> … I always go somewhere that I've memorized the menu. You don't have to reveal you wear glasses. [*Interviewer: What about recognizing the person you are meeting?*] … I just wait around till someone comes over, or starts getting up as I walk past.

Notably, this woman's dates did not always accept these "stretches." To her annoyance, she has been accused of deception – to which she responds, "Why can't they see the potential?"

"Deception" can be a matter of perspective: what is seen in, or read into, a profile is not always what the author intended. "I thought she liked sports," a male dater said of a woman who had posted a portrait of herself at the *only* baseball match she had ever attended. In fact, she had seen the photo merely as an attractive portrait, not an indicator of leisure interests. Divorced from original contexts, even the cropping of images is interpreted negatively:

> … like those pictures where they have cut someone off but you can still see part of the other person. That is weird. (Lesbian dater, aged 37.)

Mismatches between profile and in-person experience are thus more complicated than "truth" versus "lies." As suggested by accounts of the "hyperpersonal effect" in online dating (noted in Gibbs et al, 2006; and Fiore et al, 2008), we found that thin or unavailable information seemed to be a fertile ground for fantasies of an idealized partner. But fantasies can turn sour when imagined affinity runs afoul of actual dissimilarity (see also Norton, Frost and Ariely, 2007).

"Can't see the wood for the trees" Most interviewees felt they filtered long lists of superficially similar potential matches based on sparse cues. This sparseness is both a product of limited content (a few paragraphs, some photos, perhaps a video) and limited experience. Reading the expressive language of profiles is a learned skill. People did articulate clear strategies for evaluating profile validity and desirability. But the numbers of recommended profiles and requests for contact overwhelmed many would-be daters. Women especially reported hiding from others while looking through profiles.

Developers try to avoid both too many and too few search results. Both mean that "good matches" remain unseen, and hence lead to dissatisfaction with the service. One site developer linked site design to gendered patterns of site use:

> Men take a scattergun approach. They send out 200 contacts and hope one sticks. Women are more selective. And there are more men than women on the site anyway. So you do the math – women get overwhelmed and leave because they feel harassed. And men get no response so they feel like the site isn't working (Site developer, aged 32.)

(In)visible friends The profile was not the only source of attractiveness on some sites. "Friending" functionality meant that the photographs of contacts generated a "friend halo" for one's own profile:

> The more good-looking guys you have as contact, the more they get the idea of the level you are at and want. (Heterosexual female dater, aged 48.)

Yet people are not simply on the dating site – they may have multiple forms of online presence, from membership in social networking sites to work email addresses. Some sites encourage people to authenticate their identity by proving a consistent persona beyond the dating site itself; visibility beyond the site is proof of an authentic - and sincere - person.

> You get points for verifying who you are. If you can show you are the same person across different places, then you get more points [on the site]. (Heterosexual female dater, aged 48)

But despite the reduced stigma surrounding online dating, people often expressed anxiety about sharing dating with their everyday social circle. Some individuals mask or hide sexual preferences and dating practices from lovers, friends, colleagues and coworkers.

> I tend not to talk about it with my colleagues – why tell them? They are
> all married and settled down and it makes me feel like a loser.
> (Heterosexual male dater, aged 35.)

Site lines Websites actively structure dating activities. They supply tools for profile creation, and write the algorithms that sort users. They also often target niche audiences based on specific interests, leading to self-segregation of daters (Figure 1). Tailoring profiles to specific interest-based sites is complicated by the ways in which those sites render more or less visible what kind of daters *they* want. Even sexually explicit sites have their own codes:

> It's funny, on this site, you see the merchandise but not the face…People
> always show their bodies and when you get to know them then you see
> their faces. That is the part that they feel is intimate to share with you. On
> other sites you see their faces and lives and then you get surprised.
> (Heterosexual female dater, aged 48, on Adult Friend Finder.)

Norms are also enforced by other site users. That same user of Adult Friend Finder, for example, trapped between the expectations of users of sexually explicit sites *and* those of 'mainstream' sites such as Yahoo! Personals and Match.com:

> Some people get annoyed that you are on [Adult Friend Finder] and you
> want something other than just sex. If my profile says I am looking for a
> long-term thing, then I think that is fine. But I have started looking at
> other sites. But there is an omission in those sites, in the regular sites,
> nobody talks about sex, it's just not brought up which is silly. This site
> it's brought up and it's the total other end, the extreme.

The partially visible algorithm The number of profiles puts the matchmaking authority in the hands of a matching algorithm. Some websites – notably, eHarmony -- base their marketing and their fees on the promise of an algorithm that can determine emotional compatibility. Much faith is placed in the power of the algorithm by would-be daters:

> Yahoo! says we are a perfect match. She was not interested in me. But
> then wrote back to me several weeks later, and said Yahoo! still thinks we
> are a prefect match, so we started dating. (Lesbian female dater, aged 54)

Algorithms use textual data, and interfaces like those shown in Figure 2 are developed specifically to produce algorithm-appropriate inputs. We can see efforts to "tweak" the profiles as attempts to make them more broadly visible – that is, searchable and findable to matching engines. Profiles are therefore designed to get attention in the vast pool of daters, to render oneself visible both to people *and* software.

Figure 2 Standard online dating site profile page with drop-down selection boxes
and checkboxes for physical and personality presentation. Items are "objective"
(e.g., height) and "subjective" (e.g., "In a social setting I am ...."). Personality
continues with items about preferred habits Items in Lifestyle and Home Life
include marital status (single, separated, divorced), parental status (kids, no-
kids), occupation and income bracket.

When attempting to attract the broadest possible range of customers, dating sites
paradoxically delineate some clienteles as unacceptable. As illustrated by the third quote at
the beginning of this paper, services themselves impose invisibilities, rendering certain
subscribers invisible through business and cultural requirements. Sites signal the niche they
serve through imagery and targeting (Figure 1). Profile checkboxes and communication
content monitoring also clearly signal acceptable behaviors or at least the assumed
foundations of successful partnerships (Figure 2). Our interviewees, especially those with
particular tastes, told us they felt "invisible" on "vanilla sites." One 30-year dominatrix stated
"there is no category for me" and "my preferred images would not be acceptable." Many
profiles do not have categories for certain proclivities, and many surveys render invisible
unknown or unacceptable sexual preferences. Paradoxically, these elisions result in fewer
data points for the process of algorithmic match.

> You can't talk about sex openly. But it's stupid we all just use codes for
> different preferences. You get it, but the filters don't … yes and my
> pictures get taken down too … not naked pictures, pictures of me in latex.
> Some sites just don't like you to be wearing anything they think is kinky.
> So they take down the pictures. (Heterosexual female dater, aged 30.)

> I'd like to know more about health you know. It matters whether
> someone is [HIV] positive or not. You don't have to surface that
> information, make it public but I'd prefer to filter on that. (Gay male
> dater, aged 49.)

Business practicalities – invisible to daters – can result in people being blocked and removed or banned from the site. Other daters can feel confusion and annoyance at inexplained disappearances, and perhaps begin to wonder if the site developers behind the scenes are actively surveilling on-site activities. Some develop workarounds to counter the sites' actions.

> This guy contacted me. He joined so he could write to me. But as I am not a paid subscriber, I can't write back, they took out his contact information. So I can't write back, and he doesn't know I didn't get his information. It was a mess. (Gay male dater, aged 49)

> The following day his profile was gone. His email was gone. His last email referenced his personal email account and his IM. I guess they shut it down. (Heterosexual female dater, aged 42)

> The site won't let you exchange personal information through email. But most of the time the men can slip their information through, but if you try to, to slip your information to them, they always catch it.….I guess they [the developers] keep track of the women's side of things. (Heterosexual female dater, aged 48.)

> If I talk about a subject on email through the site, then all of a sudden I get contacted by guys who have those interests. Is someone looking at my emails? Does the site know? Do they read this stuff? (Heterosexual female dater, aged 37)

Off stage Online dating is not merely "online." It involves a continuum of situated actions by two (or more) actors whose relatively limited contacts obscure activities happening "on the sidelines" or "in the background." One cannot separate activity "on", "inside" or through the dating site from external contingencies (Hardey, 2002; Illouz, 2007). Would-be daters juggle practical contingencies in assessing others' potential and in planning dates.

> I would never date someone that my daughter does not like. (Lesbian dater, aged 54.)

> Yes my son really matters. I don't want him getting close to someone who then leaves my life. (Heterosexual female dater, aged 34.)

> We have a calendar in the kitchen, and I block out evenings when I am going on dates. I don't put any information other than I am going to be out. Tend to be regular days. My wife knows those are the days I am on dates, but we never talk about the details. (Polyamorous male dater, aged 37).

Characters kept invisibly "off-stage" while daters are online can – and do – become visible at face-to-face meetings. Daters stage what is seen in their homes, select date

locations to avoid others, or even keep a cell phone on in case an as-yet unmentioned child should call.

> I have a calendar in my room. Guys come over and they see it, they see all the other guys names. I've told them I am seeing other people but they still get surprised. (Heterosexual female dater, aged 48.)

> I tend to choose places to meet that are not in my neighborhood and stay away from places I may see folks I know. I don't want to have to explain. (Heterosexual female dater, aged 36.)

REFLECTIONS ON (IN)VISIBILITY

The concepts of visibility and invisibility encourage us to consider issues of romantic representation outside of the narrow lens of a self, or even a relationship between two people. Rather, online dating involves multiple types of relationships, and multiple places of action and transaction:

- *Dater to themselves* How I see myself. How I want others to see me through the dating site profiles and through who is associated with me there, through other data on me that may be findable/searchable.
- *Dater and potential partner(s)* How I look for what I want. How I have been told I am seen (through my profile and in-person).
- *Dater to other (not desired) daters* How do they find me? Why are they matched with me?
- *Dater and online dating site* How I learned to present myself. How I learnt to search and select. How I got around the system. How can I get more suitable matches. How the service helped me/let me down.
- *Dater and friends/family/work networks, who may not know s/he is dating* How I hide/share my dating/dates.

In terms of the literature that addresses online dating, this broader perspective opens up the discussion and the possibility for different way to think about online dating. For our design research purposes, we see three areas that can be informed by our approach:

(1) The search algorithm is not transparent. It is an explicit part of match-making that some daters see as an actor in their relationships with the online dating service *and* with potential partners. Daters learn to "manage the system"; that is, the interface, the algorithms / recommendations to filter, and the proposed partners they review and meet.. They craft profiles to attract better matches. They imagine how the system views their correspondence and modulate their behavior accordingly. The opacity and lack of interrogability of the technical matching system, offer a fertile ground for the imagination – and for irritation. We have proposed and sketched several redesigns, features and applications: extensible/editable checkbox interfaces; mechanisms and representations for playfully surfacing match/rank/recommend rationale; a collaborative date-planning application (Churchill,

Goodman and O' Sullivan, 2008); and designs for post-date diaries. These designed interactions are ways to create a richer 'conversation' between daters and the algorithms that are working on their behalf.

(2) People are not *just*, or *only* daters. They are also children, spouses, and parents who may hide parts of their dating lives from those who are otherwise close to them. The online dating industry often discusses the disclosure of information such as real names and phone numbers in terms of physical safety. While protection from relative strangers is important, online dating also involves shielding oneself from family and friends. Designing for dating means designing for all kinds of non-work-safe activities: sex (transgressive and otherwise), stalking (or even just the fear of it), lying (minor and major). Designers of dating services understand this, but often sanitize it with terms like "safety" or "deception." These things are opportunities, not problems, for clever socio-technical interventions – like dynamic profiles that adapt to differing norms, or one-use phone numbers linked to your online account.

(3) Designing for online dating does not necessarily mean that a company must accommodate all forms of sexual intimacy in the web forms driving search – ie, polyamory, bondage, or one-night stands. But a prime irony of researching dating is how it makes clear that one role of research is to surface practices that a website hides, but that users would like see to made visible. We found ourselves with an unexpected number of participants who happily talked about lives for which there is no profile-page checkbox: the dominatrix looking for a boyfriend; the transgender mother of three; the polyamorous parents. While many dating websites attempt to hide these ways of life, these invisible subscribers do not go away. Instead they respond – as have other historically sanctioned groups – with coded messages. The logic of "niche" services would insist on segregation of these groups. Given that online dating sites must find new types of subscribers in order to grow, trying to excise unwelcome self-representations and desires seems both futile and counterproductive. A compromise between appropriateness, consistent branding and the disenfranchising of certain identities and behaviors is possible. As a beginning, we suggest thinking about profiles – not just search results – as mediated by an algorithms governing disclosure.

This latter point is important. Initially, we wanted to make the emotional and practical work of dating visible. But there is a paradox. One cannot discuss some of the more vivid aspects of our daters' lives without apparently reducing complex behaviors to simple categories – such as those used for behavioral targeting. By their nature, design tools like user personas are abstractions, and as such can lose the nuance and detail that is central to how online dating is lived. Many of our activity-centered stories elided the emotional reality of dating: the anxiety about unreturned phone call, the rush to get to the restaurant on time, anxieties about sexual preferences/proclivities of the other that may spell out incompatibility, and even the quest for the perfect profile. When we do not communicate these emotional states, we miss opportunities for design, such as addressing the anxiety and uncertainty that so many online daters face as they move from the website to a meeting, and then to an evaluation of that meeting and the potential for future meetings.

This turn to emotion and especially its embodiment in "the first date" is not simply a contribution to the literature of dating, or even just an interface design support. Unlike other analyses of online dating, we see the *business* of online dating as a question of careful and sensitive branding strategy. By interposing themselves between would-be couples, businesses become silent partners in the matches they make. At this emotionally charged time, matching and dating experiences can engender strong reactions, both positive and negative. Deception is a way to highlight this point. Dating websites often prominently feature glowing testimonials, but repeated lawsuits have alleged fraud and misleading practices against some of the most popular sites. Some of these cases appear to derive from over-interpretation (ie, the "hyperpersonal effect") and ensuing disappointment, rather than intentional exploitation or deception.

SUMMARY

Daters, website interfaces and algorithms, and business models together create the experience of online dating. Our detailed qualitative work complements larger scale activity log and survey data, but goes further to reveal how constraints, limitations and distortions introduced intentionally or artifactually by site implementation or by service design deem ineligible or render invisible certain daters and/or dater characteristics. Our process-focused approach not only challenges goal-oriented, "get the job done" approaches, but also can productively inform new "along the way" services. These services can positively address the anxiety and uncertainty that so many online daters face as they move from the website to a meeting. As a contribution to EPIC, our close-reading of the experience of people as social actors in situ, has shown that a taken for granted category (online dating) does not imply a person, a practice, a technology or a business model. Only by seeing the various actors in the process can we begin to see opportunities for new services and new design.

REFERENCES

Churchill, Elizabeth F., Goodman, Elizabeth and O'Sullivan, Joseph.
2008   MapChat. Conversing in Place. In Proceedings of CHI 2008, pages 3165-3170. New York: ACM Press.

Donath, Judith S.
1998   Identity and Deception in the Virtual Community. In M. Smith and P. Kollock (eds.) *Communities in Cyberspace*. London: Routledge

Ellison, Nicole, Heino, Rebecca, and Gibbs, Jennifer.
2006   Managing impressions online: Self-presentation processes in the online dating environment. *Journal of Computer-Mediated Communication*, 11(2), article 2.

Fiore, Andrew T. and Donath, Judith S.

2005   Homophily in online dating: when do you like someone like yourself? In *Proceedings of CHI '05 Extended Abstracts*, New York: ACM Press, pp 1371-1374.

Fiore, Andrew T., Taylor, Lindsay S., Mendelsohn, Gerald A., and Marti A. Hearst
2008   Assessing Attractiveness in Online Dating Profiles. In *Proceedings of CHI '08*, New York: ACM Press, pp 797-806.

Gibbs, Jennifer, Ellison, Nicole, and Heino, Rebecca
2006   Self-presentation in online personals: The role of anticipated future interaction, self-disclosure, and perceived success in Internet dating. *Communication Research 33(2):* 1 – 26.

Goodman, Elizabeth and Churchill, Elizabeth F.
2007   After the Match: Mobility and First Dates. In *Proceedings of DUX'07*, New York: ACM Press.

Hardey, Michael
2002   Life beyond the screen: embodiment and identity through the internet. *Sociological Review,* pp 570-585.

Hancock, Jeffrey T., Toma, Catalina, and Ellison, Nicole B.
2007   The truth about lying in online dating profiles. In *Proceedings of CHI '07*, New York: ACM Press, pp 449-452

Hitsch, Günter, Hortaçsu, Ali, and Dan Ariely
2006   What Makes You Click? An Empirical Analysis of Online Dating. *Annual Meeting, Allied Social Science Associations.* Boston, MA, January 6–9, 2006.

Illouz, Eva
2007   *Cold Intimacies. The Making of Emotional Capitalism.* Cambridge, UK: Polity Press.

Jones, Rachel and Ortlieb, Martin
2006   Online Place and Person-Making. Matters of the Heart and Self-Expression. In *Proceedings of EPIC 2006*, American Anthropological Association, pp 214-228.

Katz, Evan Marc.
2003   *I can't believe I'm buying this book: A Commonsense Guide to Successful Internet Dating.* Berkeley, CA: Ten Speed Press.

Norton, Michael, Frost, Jeana, and Ariely, Dan
2007   Less Is More: The Lure of Ambiguity. *Journal of Personality and Social Psychology* 92(1):97–105.

Pandey, Anita

2004   Culture, gender, and identity in cross-cultural personals and matrimonials. *World Englishes* 23(3):403-427

Silverstein, Judith and Michael Lasky
2004   *Online Dating for Dummies.* New York: Wiley.

Web Resources

Brym, Robert J., and Lenton, Rhonda L. 2001   Love Online: A Report on Digital Dating in Canada. Accessed July 9, 2008, www.nelson.com/nelson/harcourt/sociology/newsociety3e/loveonline.pdf

Elliott, Nate. February 9, 2007. Online Dating in 2007. US Market Searches for New Users as European Market Challenges US Dominance - www.jupiterresearch.com/bin/item.pl/research:concept/63/id=98787, accessed 28 June, 2008.

Emarketer. "Online Dating Gets Tough." February 14, 2006 - www.emarketer.com/Article.aspx?id=1003826, accessed 26 June, 2008.

Frost, Jeana., Norton, M.I. and Ariely, Dan. 2006. Improving Online Dating with Virtual Dates. HBS Marketing Research Paper No. 06-058 Available at SSRN: http://ssrn.com/abstract=945389, accessed 26 June, 2008

Lunn, Bernard. The Fork in the Road for Social Media, May 28th, 2008. www.readwriteweb.com/archives/the_fork_in_the_road_for_social_media.php, accessed 26 June, 2008.
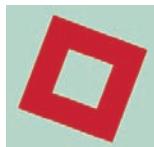
Madden, M. & Lenhart, A. 2006. Online dating. Washington, DC: Pew Internet and American Life Project., www.pewinternet.org/pdfs/PIP_Online_Dating.pdf, accessed 26 June, 2008

Neilsen Online: Online Personals Watch. "Interview With Nielsen Online, Alex Burmaster." http://onlinepersonalswatch.typepad.com/news/2008/04/interview-wit-1.html, April 18, 2008, accessed June 30th 2008.

Pasha, Shaheen. 18 August, 2005. Online dating feeling less attractive. Online dating sites are facing some loneliness amid an industrywide slowdown. http://money.cnn.com/2005/08/18/technology/online_dating/index.htm, accessed 26 June, 2008.

Sullivan, B. Online daters sue matchmaking sites for fraud. MSNBC. Nov 18, 2005 - http://www.msnbc.msn.com/id/10098349/, accessed 26 June, 2008.

U.S. Dating Services Market. Market data Enterprises Inc. April 1, 2006, http://www.mindbranch.com/listing/product/R237-214.html, accessed 26 June, 2008

PATRICIA SUNDERLAND
Practica Group, LLC

The papers in this section address issues that have long been of deep concern among anthropologists and other researchers working in the ethnographic tradition: the dynamics of power and representation within the field as well as during later utilizations of ethnographic work. Spanning discussions of the value of putting both choice and cameras in the hands of respondents to the unexpected virtues of the traditional essay form for corporate audiences, these papers invite us to rethink our assumptions of what is possible. In the end, the authors offer hope, inspiration, and solutions.

> It seems to me that the most powerful explanations, that is, those that generate
> the most out of the least, are the ones that take writing and imaging craftsmanship
> into account.
> Latour 1990:21

Introduction

In his EPIC 2007 keynote address, Tony Salvador reminded us that even if ethnographic specialists in organizations may well have the privilege of fabulous jobs, we have also been "woefully incapable of representing our work – our experiences, analyses, syntheses, etc., convincingly and understandably to those who are not us" (Salvador 2007: 5).

As Salvador continued, it is the ability to translate and transmogrify our work that is so often lacking, and, in particular, the ability to communicate in ways that provide a space for mutual shared experience – spanning not just ourselves and those with whom we conduct our research, or between ourselves and our contracting clients, but among all parties.

The papers in this section offer concrete examples of how some of this representation, translation, and shared space can be achieved. In doing so, the authors implicitly and explicitly address the dynamics of power that are implicated in our methodological and representational choices, choices which simultaneously always implicate both theoretical and political considerations.

Utilizing Paradoxes of Video, Prose, and Performance

In the first paper, Jonathan Bean explores the virtues of putting cameras into the hands of research participants. In the context of studying the Danish concept *hygge* (only roughly translatable as "cosiness"), Bean argues that his intervention of asking participants to choose among digital still and video cameras to help him document instances of *hygge* in the home produced a shift in the power dynamic between researcher and researched as well as a more refined explication of *hygge*. As Bean points out, the modality allowed participants a voice in, and control over, that which was represented. Shifting the object of the research from the person to the material environment paradoxically also allowed for the visible representations of the generally invisible: feelings, thoughts, and expectations. Bean argues, echoing Bruno Latour, that the method "remaps the traditional division between subject and object. The material objects become the object, or what is interviewed; the researcher and the participant are doing the interviewing" (Bean p. 108 below).

The next paper, "Video Utterances: Expressing and Sustaining Ethnographic Meaning through the Product Development Process," by Meg Cramer, Mayank Sharma, Tony Salvador, and Russell Beauregard points to alternative possibilities for videographic representation. Noting the importance of bridging the divide between local and on site meanings and later interpretations, the authors point to the crucial need to consider the varied purposes for which video-based data are utilized. Thus they argue for the tailoring, and even recreating of, representations accordingly. In doing so, they remind us that while the goal to retain ethnographic texture in videos might be laudable in some settings, in others this is simply counterproductive. Again invoking Latour, they remind us of the folly. In Latour's original words: "He who visualizes badly loses the encounter; his fact does not hold" (Latour 1990:41).

Joachim Halse and Brendon Clark then take us one step further with "Design Rituals and Performative Ethnography." On the scaffold of classic anthropological theory regarding performance and ritual in social life, Halse and Clark ask us to reconsider design workshops as performative events. With two examples, one featuring collaborative analysis and the other a reenactment of ethnographic events, Halse and Clark also ask us to consider the value that ethnographic fragments can afford in overcoming the problematic "real people refrain" of ethnographic research as enunciated by Nafus and anderson in 2006. Halse and Clark point to the possibilities that emerge when ethnographic fragments are utilized in ways that openly foster and acknowledge the investment and projection of the interests of others in the analysis and design process.

Finally, Anne Line Dalsgaard's contribution paradoxically brings us full circle in terms of anthropological representation as well as beyond what is generally framed as an acceptable medium for corporate audiences. Her discussion of a collaborative project to illuminate workplace organization and meanings in a software company and an accounting firm forces us to question our assumptions of what is both possible and desirable. Here "the report" was a series of five essays in which she consciously utilized the power of *verfremdung* (defamiliarization in the tradition of Bertolt Brecht) as representational device while also striving to highlight the ambiguities, interpretations, and contradictions of the field within

the text. The essays were powerful tools for consideration of company practices -- and changes in those practices. Nonetheless, Dalsgaard poses the question of whether the essays could have gone even further. As Dalsgaard (p. 157 below) pointed out, however ironic it may seem, one of the accountants later "surpassed" their "representational experimentation" in a short story he wrote to introduce a new product to the company.

As a whole, the papers in this section take us beyond simply hand-wringing over what our methodological and representational approaches can and cannot accomplish and offer solutions. These solutions strive to overcome self/other and theory/method dichotomies while incorporating strategies of transparency (although as Christina Garsten reminded us in this year's opening keynote, we might still want to inquire into what it obscured as well as the ends for which this transparency is invoked). The solutions also allow us to open ourselves to the art of -- and in-- representation, whether in the art of enacting *hygge*, video products that speak, performances or essays that analytically engage. Crucially, the papers serve as inspiring reminders for us to take off the numbing blinders and prohibitions of our own research/representational/persuasive traditions and to do so in ways that truly value the concerns and projects of those with whom we work, whether as research participants, colleagues, clients, or customers.

REFERENCES

Latour, Bruno
1990   Drawing things together. In *Representation in Scientific Practice*. Michael Lynch and Steve Woolgar, eds. Pp19-68. Cambridge: MIT Press.

Nafus, Dawn and ken anderson
2006   The real problem: Rhetorics of knowing in corporate ethnographic research. In *Conference Proceedings: Ethnographic Praxis in Industry Conference [EPIC] 2006*. Pp. 227-241.   Arlington, VA: American Anthropological Association.

Salvador, Tony
2007   Keynote Address: Thoughts on representation. In *Conference Proceedings : Ethnographic Praxis in Industry Conference [EPIC] 2007*. Pp. 1-6.   Arlington, VA: American Anthropological Association.

Beyond Walking With Video: Co-Creating Representation

JONATHAN BEAN
Department of Architecture, UC Berkeley

This paper discusses a method I used to conduct a study of hygge*, a Danish concept that is usually translated as "cosiness." I wanted to learn more about* hygge *and how it related to technology in the home. The method I used builds on my experience with spatial ethnography, on Bruno Latour's theory of representation, and on the work of visual anthropologist Sarah Pink. I asked participants to use a video or still camera to help me document their home. With participant and researcher both behind the lens of a camera, I saw a significant remapping of the power relationship between researcher and participant; we were able to focus together on the material home as the object of the research. In addition to reducing the time needed to build rapport, this method offers a way to analyze cultural practices such as* hygge *that are not entirely visible in the material world.*

> By the way: *hygge* is so intangible that it disappears under close analysis.
> *from "Egocentrisk Hygge"* by Jørgen Hartmann-Petersen; in *Om Hygge* (About *Hygge*), translated by author.

INTRODUCING *hygge*

In summer of 2008, I worked as an intern for Intel Corporation's Domestic Designs and Technologies Research group. I conducted an ethnographic study that explored the relationship between technology, spirituality, and the home in Denmark. I was particularly interested in the intersection between technology and *hygge*.

Hygge is a Danish world and concept. As a noun, it is usually translated into English as "coziness." But it means much more than that: elements of ritual, spirituality, domesticity, contentment, pleasure, indulgence, and restorative nostalgia all merge in *hygge*. Together with its adjectival form, *hyggelig*, the word is one of the most frequently used in conversational Danish. For example: the Danish version of Starbucks, a chain called Baresso, markets itself by selling coffee and *hygge*. One of the highest compliments you can pay a host after a dinner party is to say it was *hyggelig*. And, in a fairly new linguistic development, you can now bid your friends farewell with a warm *"hygge!"*

FIGURE 1 *Hygge* defined in a Danish dictionary. The definitions have to do with comfort; notice the circular reference in the third definition, which explains one use of *hygge* using its adjectival form, *hyggeligt*.

Hygge is difficult for non-native Danish speakers, including the author of this paper, to correctly pronounce. A good approximation is to say HUE-guh, while imagining that you have a gentle American Southern accent: over-accent the "U" in the first accented syllable, and swallow the "h" of guh. As an alternative, the word approximately rhymes with beluga.

Though it is a deep part of Danish culture, Danes have questioned its role. After World War II, the widespread adoption of functionalist modern architecture, known in Scandinavia as *funkis,* lead to a cultural debate over whether the concept of *hygge* could survive in the modern material world of hard edges and white walls. This debate extended through the 1960s, when *Politiken*, Denmark's leading newspaper, published an entire series of newspaper articles written by cultural authorities who each attempted to define the real meaning of *hygge*. Given the prevalence of the concept and its prior collision with the innovation of modern architecture, I was curious to see whether and how the use of technology and technological artifacts, such as cell phones and laptop computers, intersected with the idea of *hygge*.

My own experience of *hygge* will be resonant with those who have experienced Danish weather. I spent the better part of July in Denmark, and while the Danish winter is dim and wet, the summer is usually pleasant, with long, sunny days.

On my research trip, it rained every day, nearly all day. About two weeks in, I had gotten the hang of it; I had obtained the most enormous umbrella I could find and a good pair of galoshes, and had committed to get outside whether it was raining or not. One evening after I had spent a long day in the field, the rain stopped, so I went for a walk. I passed an ice cream shop and ordered a medium cone with chocolate sprinkles. The rain

started again, so I sat under my blue umbrella on a wet bench, overlooking one of Copenhagen's lakes. The sky was overcast, but bright. It was just before nine. There I sat, wet and cold, a white swan swimming before me in black water, the ice cream rich and delicious. Suddenly, despite the foreboding weather and the ice cream chill—perhaps even because of it—I felt warm, content, and placid. This was *hygge*, I realized. And as soon as I had the thought, the feeling went away.

The Method

I interviewed a total of eleven households over the course of approximately three weeks. I spent between three and seven hours with each participant. I found participants by asking professional and academic contacts in Denmark to forward a call for participants. Participants were compensated for their participation in the research.

At the beginning of my first visit, I asked for help documenting the interior of the participant's home. I offered the participant a choice of recording device: digital SLR, digital point-and-shoot, or digital camcorder. On the first visit, we went around the home together, documenting the home as an artifact to be interpreted, while the cameras (and a digital audio recorder, functioning as backup) worked to record our journey and capture our conversation over what we should capture on video or film. This is a more interactive version of what visual anthropologist Sarah Pink has since labeled "walking with video." On the follow-up visit, I operated the video camera and still camera, capturing the participants moment by moment as they drew a cognitive map of home and reflected upon the focus of the research (Hasbrouck 2007; Lynch 1988).

I found the mere act of asking for assistance with data collection to subtly shift the power dynamic between researcher and participant. Upon reflection, I found that the researcher and participant became allied in their task of documentation, and the object of study became the material artifacts on the other side of the lens. This method follows work by Latour (1999) on the creation of scientific knowledge through the manipulation of artifacts and by visual anthropologists who aim to understand how people use artifacts to create knowledge. This method offers a way to create a discussion around the normally invisible act of assigning cultural meaning to objects; building on Alex Taylor, Laurel Swan, and Dave Randall's idea (2007) of listening with indifference, asking the participant to help create video and photographic data is a way of seeing with indifference.

This collaborative method builds on theoretical frames from my own interdisciplinary background studying social factors in architecture, my experience as a freelance ethnographic researcher, and ideas from the fields of visual anthropology and Science and Technology Studies. It goes beyond the method outlined by Sarah Pink in her 2007 article "Walking With Video" to propose a new way that researchers and participants can work together to understand concepts that slide between the material and immaterial world. Rather than simply using a video camera to capture the richness of the ethnographic fieldwork, my

method puts researcher and participant on the same side of the lens. The artifact of the home—the *setting* for the study—replace the human participant as the object being scrutinized.

The Method

The Theoretical Background

I studied architecture because I am interested in how people create meaning in space. The academic branch of architecture interested in this question is called either environment/behavior [E/B], or, more ponderously, but appeasing to those leery of the causality implicit in E/B, Social Factors in Architecture. Founding figures are anthropologist William Whyte, who used film and stop motion photography to make recommendations for better plazas in New York City; anthropologist Edward Hall, who introduced the idea of proxemics; and, the somewhat more controversial figure of filmmaker Oscar Newman, whose film and book *Defensible Space* continue to inform urban design. Out of its allegedly deterministic roots, the field of Social Factors in Architecture has evolved to recognize that space and human behavior are mutually constituted. Ethnographic research has found a home in a few architecture firms, such as HOK, although it is much more firmly entrenched at consultancies such as IDEO. Berkeley professor Galen Cranz has developed a method for applying ethnography in the context of architectural design. Her method, based in semantic ethnography, was developed and continually tested as part of a course she has taught for the past 25 years. It laid the groundwork for my research method.

My area of interest is the home, as it is the space over which individuals tend to have the most control, and, therefore, where expression is the most revealing of the unpredictable relationship between attitude and behavior, and where identity is formed and reflected (Csikszentmihalyi and Rochberg-Halton 1981; Marcus 2006). *Hygge* is closely linked to the home, but the challenge of studying it as a concept, I realized, is that *hygge* is not all about space, but is rather a *product* of interaction in space. In many ways, *hygge* is invisible.

At the time, I was reading the literature of Science and Technology Studies. Reflecting upon the ethnomethodological principle of building theory out of conversation, I thought if there was some way to have a conversation about practices in the home, a discussion about *hygge* might naturally arise. I also had concerns about building rapport. *Hygge*, I had learned from a 1976 study by anthropologist Judith Freedman Hansen, was closely linked to Danish identity; how would participants react to an outsider studying something so closely linked with their culture? From prior experience doing in-home ethnography, I was also concerned with how I might help participants get over the fear of their home, their image, and their voice being recorded.

The method I developed is similar to that visual anthropologist Sarah Pink outlines in her article "Walking With Video." The key difference is that whereas Pink holds the video

camera while conducting research, my method puts a camera in the hands of *both* the researcher and participant. Many, if not all, of the benefits Pink identifies in her work also apply to my method. For example, in "Walking With Video," Pink relays how video can help relay a sense of place through capturing sensorial experience. She claims that video can help explain how people relate to their environments in two ways:

> First, video provides us with a tool that can enable embodied communication about empathetic understandings of and representations of other people's perceptions of their environments. Second… anthropological film/video that represents people 'walking with' the camera person/anthropologist also stands as film about place as it is made, in the sense that the film/videomaking context serves as a process through which people, things and sensory experiences are drawn together.

Looking back upon my research, I can identify other benefits of my method for applied ethnography:

Speed with reflexivity. This method quickly generates a rich set of data that the participant and researcher can reflect upon while the data is being collected. This is the same aim as working with cultural probes such as photo journals, but it takes away the time needed for a participant to complete the assignment—as well as eliminating the risk that the assignment will be forgotten or left undone. Interestingly, putting the camera into the hands of the participant, perhaps because it serves as a tangible reminder that they are creating a representation, leads to some of the same types of conversations a researcher might have with a photo journal. Thus, this method can reduce time spent by both researcher and participant, while still providing opportunities to reflect on the data.

The method also worked to quickly build rapport with informants. The power dynamic shifted the instant the participant picked up the camera. Behavioral psychologists explain this as the well-known mimicry effect; with our posture and movement aligned, participant and researcher were having a similar physiological and emotional experience (Lakin 2003). This also might have to do with the level of trust implied in allowing a relative stranger to handle expensive video equipment—or in the simple and humbling act of asking for help.

Understanding Place as Representations of Human Action. This method remaps the traditional division between subject and object. The material objects become the object, or what is interviewed; the researcher and the participant are doing the interviewing.

Before using this method, I saw my time in the field as data collection. My goal was to extract as much data as possible so that I could sit down at my desk with quiet and time to think and make sense of it all. While in the field, I always had the nagging feeling I was missing something important: what key object would I neglect to photograph? What simple question would I forget to ask?

But this method, with the clear focus on documentation, created an opportunity to conduct analysis with the participant early in the research process. When I carried a camera alongside the research participant, it became clear that we were both creating representations and doing research. Barthes' discussion of photography (1981) is useful here. The participant would explain not only the *studium,* or the ostensible subject of the photograph just snapped, but also the *punctum*, the "element that rises out of the scene" to "pierce" the viewer.

This is a significant point because, as Bruno Latour points out, we researchers are engaged in the transformation of representations themselves into research. In "Circulating References: Sampling the Soil in the Amazon Rainforest," Latour analyzes how an interdisciplinary team of researchers create a theory by taking physical samples of the soil in the rainforest, transforming them with the aid of scientific tools into data points that can support or negate a scientific hypothesis. The dirt gets pulled out of the ground and put in a suitcase that is taken out of the Amazon, much as the information the soil samples represent gets figuratively pulled out of the suitcase and turned into a report published in a scientific journal.

Latour sees these elements—the dirt, the soil samples, the scientific paper—as representations that exist in an unending chain. Going one way, Latour sees representations as being amplified. They gain compatibility, standardization, and relative universality. Going the other way on the chain, and representations are reduced. They gain particularity, materiality, and become local. Changing from one phase to another means making a trade-off between what is gained through amplification and what is lost through reduction.

My method made the shift from one phase of representation to another more visible. In so doing, it acknowledged to the participant their essential role in the research. Because we were both engaged in the act of recording, it was necessary for the participant to explain what the object behind the lens meant. Perhaps this is simply because putting a video camera in the hand of a research participant makes it clear that the participant is helping to create a representation that will have a "life of its own" separate from them. This method of collaborative and reflective representation gives the participant chance to help create—and therefore control—the representation with which their identity is inextricably linked.

Figure 2. Discussing the process. More than one participant took a
picture of me, the researcher, which lead to a discussion about the
research process.

At a basic level, putting a camera with an on/off switch in the hands of the participant
offers a sense of direct control over the interview process, which is often taking place in
their own home. In this way it might help overcome feelings of intrusion. There are
obvious limits to this remapping of control—I left with the photographs and video; the
participants signed a release; a third party controls the data; but these are the conditions
typical of most academic and corporate research.

Cataloging with narrative. This method helps the research to be more wide ranging in
subject. Home tours feel less invasive when the participant is pointing the camera, and I
noticed a give and take between who is leading the tour of the home and who is following.
Video is also a rich resource for generating a record which can be used to make accurate
floor plans, diagrams, inventories, and so on, of the parts of the home that actually matter to
the people who live there. This is a critical benefit of this method; with my background in
architecture, I certainly could have created measured drawings of the home, but doing so
would have been problematic, both for the time it would have taken, and for the message
communicated by visibly measuring a person's home. But working from the video, I can
generate a representation of the space that is arguably more accurate than the most carefully
measured floor plan. My representations are shaded by the time I was able to spend
engaging with the participant and understanding their relationship to the space, rather than
an undifferentiated, if complete, inventory of every last object in their home.
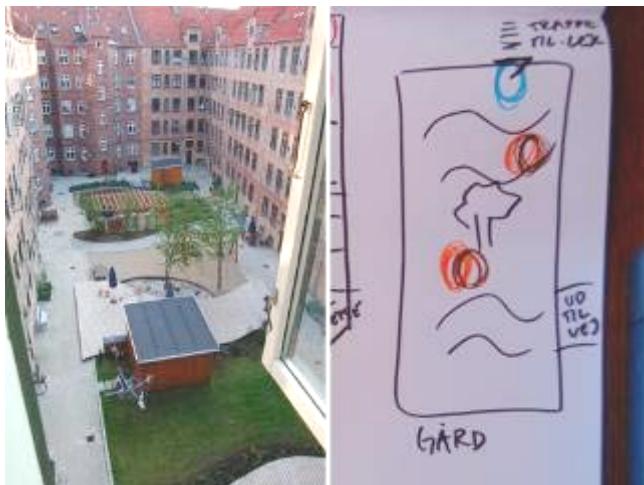
Figure 3. Multiple representations. The cognitive maps help to highlight objects of interest in the photographs and video.

It is also possible to ask the participants to create floor plans or cognitive maps *while* recording that process on video. I did this in the second interview when I asked participants to draw cognitive maps of their homes (see Lynch 1988 and Hasbrouck 2007). Comparing these maps to the video and the photographs generated in the house tours is revealing of the spaces, objects, and practices participants actually regard as important in their own homes, which come to mind first, and how these things relate to one another. Methods using probes, such as house tours, inventories, or evocative objects, do not get at personal importance as effectively. For example, one participant, Karin, explained that the significance of the photographs in her home office. Her home office is where Karin connects with her family using Skype and email on the computer, and it is where she hangs pictures of her relatives. Photographs and other things hung on the walls in other rooms are reflective of her identity and the relationship she has with her husband. The value of the video is that the narrative that goes along with each object stays attached them to place where the object is displayed.

Findings: Understanding *Hygge*

Per: This *hyggelig* thing is very -- I've been thinking a lot about it, it's very, very difficult.

Author: Yeah.

Per: Yeah. Cause it is a - it's really difficult thing. It's more like - well *hyggelig* is more like - kind of like - it's a bit like music. Like you know if you play a note on the guitar, one note is just a note. If you play two notes, it could be just two notes… but when you put them together and when the sum of the two is more than just two, it's more like a symphony… it brings something more to it.

That's kind of *hyggelig*.

It's not one plus one adds up to two; it's more like four or five. *Hygge* builds up to something bigger. But it's just difficult to create a picture without explaining it.[1]

Hygge, really *is*, in all fairness to Per, a difficult thing to explain. As the epigraph of this paper explains, it is the kind of thing that goes away the moment one identifies it as existing. His explanation is the best I heard to explain the framework that needs to be in place for one to experience *hygge*: it is a certain kind of alchemy. Another pair of participants, Karen and Poul performed a more stereotypical version of *hygge*, but Karen went out of her way to reassure me that the *hygge* they posed for was "not a lie," but actually something they did together.

In many ways, I found that *hygge* exists much as it did when anthropologist Friedman-Hansen studied it in 1974. Changes in material culture and technology, however, do suggest a few amendments to her analysis. Friedman-Hansen suspected that it was the small size of the average Danish home that lead people to be closer to one another, and the cultural demands of *hygge* that necessitated lightweight, easily movable furniture. Danes today, including those I studied, live in relatively spacious homes, yet the proxemic aspects of *hygge* remain. *Hygge* requires closeness, either physical or psychological.

Technology can be very much part of the experience of *hygge*, especially forms of technology that are portable or easily moved, such as laptop computers, handheld radios, cell phones, and the like. Technology that enables or enhances communication with those in one's inner circle—or one's self—is likely to be viewed favorably, as is technology that can enhance safety or security, such as a cell phone carried "just in case" and turned off, so as not to disturb the moment.

Television is especially problematic in the experience of *hygge*. The experience of consuming video media can be part of *hygge*, but the television and other material of video—DVD player, wires, humming fan, glowing lights—are not. Many participants preferred to consume video media on laptop computers or on moderate size flat screen displays or with DVD players that would be taken out for the purpose—then put away afterwards.

---

[1] Transcript excerpt edited for clarity.

Implications for Research

Because the method requires that researcher and participant work together to create a representation, it is particularly well suited for understanding concepts such as *hygge* that involve things that slide back and forth between the material and the social world. Examples of this slide in action include aesthetic taste, as explained by Cranz (2006); Latour's explanation of how soil samples become scientific theory in "Circulating References" (1999), and the many examples of the material effects of categorization schemes in Susan Leigh Starr and Geoffrey Bowker's book *Sorting Things Out* (1999).

The video-and-photo method captures the stories behind material objects. It preserves the sense of spatial and temporal order in the home. Like other methods involving video, it shows objects and practices in context (see Ruby 2005). And, most importantly, it lets people act out ideas or show concepts that do not fit easily into words.

Figure 4. "That's not a lie." Poul and Karin performing *hygge*.

The key difference to this research method is the shift in the power dynamic between researcher and participant. More so than material probes, this method addresses concerns about the effect on research of the power differential between corporate researcher and participant by providing a way to use the camera as a technological tool to turn the research focus on place and space. This method offers numerous practical benefits, too. It provides alternative ways to practice ethnography that work well when time is limited, or where it might be difficult to build rapport with a respondent. Also, using more than one camera at a time generates a rich set of representations, and an opportunity to reflect upon the creation of those representations in the usual way—in the analysis phase of the project, after the interview is completed—and also at the very time the representations are created.

Because the method offers both the researcher and the participant the opportunity to reflect upon the representations they are creating together, it method is an effective way to learn about concepts that float between the material and the immaterial, or the social and the "real." By situating the material environment as the subject of the study, I found that it is possible to create deeply meaningful—and visible—representations of things that are normally invisible, such as feelings, thoughts, and expectations. Blurring the lines between subject and object can be especially beneficial when the thing being studied is one of those intangible—or invisible—things "you just have to experience yourself" in order to fully comprehend — such as *hygge*. In this way, the method is well suited for studying the kinds of taken-for-granted cultural ideals Elizabeth Shove explores in her 2003 book *Comfort, Cleanliness, and Convenience*. Put another way, these are words or concepts that may seem hackneyed or clichéd, but which still have great cultural force.

The key to the method is an interdisciplinary approach that holds that space is a key way of understanding culture and that builds on a wide-ranging set of theoretical approaches. The method works because, to use the language of Actor-Network Theory, it creates a sense of symmetry in the analysis between the researcher, the participant, and the space, objects, and practices that make up the participant's home. So, while *hygge*—like so much else—may go away as soon as it is named, that does not mean that it can not be understood.

REFERENCES

Barthes, Roland, trans. Richard Howard.
1981   *Camera Lucida.* New York: Hill and Wang.

Bowker, Geoffrey C., and Susan Leigh Star
1999   *Sorting Things Out.* Cambridge: MIT Press

Cranz, Galen, et al.
2006   *Ethnography and Space: Semantic Ethnography for Architects.* Course reader for
        Architecture 110, Department of Architecture, University of California at Berkeley.

Csikszentmihalyi, Mihalyi, and Eugene Rochberg-Halton
1981   *The Meaning of Things: Domestic Symbols and the Self.* Cambridge: Cambridge University
        Press.

Hansen, Judith Freeman
1976   The Proxemics of Danish Daily Life. *Studies in the Anthropology of Visual
        Communication* 3(1): 52.

Hasbrouck, Jay
2007   Mapping the Digital Home: Making Cultural Sense of Domestic Space and Place."
        Intel Technology Journal. http://www.intel.com/technology/itj/2007/v11i1/s1-

mapping/1-sidebar.htm (Accessed February 2007).

Lakin, Jessica L
2003   Using Nonconscious Behavioral Mimicry to Create Affiliation and Rapport. *Psychological Science* 14(4): 334-9.

Latour, Bruno
1999   Circulating Reference: Sampling the Soil in the Amazon Rainforest. In *Pandora's Hope: Essays on the Reality of Science Studies.* Cambridge, Mass.: Harvard University Press.

Lynch, Kevin.
1988   Good City Form. Cambridge, Mass.: MIT Press.

Marcus, Clare Cooper
2006   *House as a Mirror of Self: Exploring the Deeper Meaning of Home.* Berwick, Me.: Nicolas-Hays.

Pink, Sarah
2007   *Doing Visual Ethnography: Images, Media and Representation in Research* (rev. and expanded 2nd ed.). London: Sage.
2004   *Hometruths: Gender, Domestic Objects and Everyday Life.* Oxford: Berg.
2007   Walking with Video. *Visual Studies* 22(3): 240.

Ruby, Jay
2005   The Last 20 Years of Visual Anthropology: A Critical Review. *Visual Studies* 20(2): 159.

Shove, Elizabeth
2003   *Comfort, Cleanliness, and Convenience: The Social Organization of Normality.* Oxford: Berg.

Suchman, Lucy, Trigg, R. H., and Blomberg, J.
2002   Working Artifacts: Ethnomethods of the Prototype. *British Journal of Sociology* 53(2): 163-179.

Swann, Cal.
1995   DK = Design Kultur. *Design Issues* 11, no. 3: 3-14.

Taylor, Alex S., with Laurel Swan and Dave Randall
2007   Listening With Indifference. In *Ethnographic Praxis in Industry Conference [EPIC] 2007*, 247-258.

Video Utterances: Expressing and Sustaining Ethnographic Meaning through the Product Development Process

MEG CRAMER
MAYANK SHARMA
TONY SALVADORRUSSELL BEAUREGARD
Intel Corporation

In this paper we discuss the use of short, specific videos to communicate ethnographic data throughout the product development process. Ethnographic videos of this nature provide complex information in short "utterances" (zero to three minutes) that researchers use to effectively convey local meaning to other participants in the process. Video utterances can be used to create opportunities for participation in product ideation, recognize key features and identify problems during product testing. With proper scaffolding, the video utterances are an effective means of contextual representation proving to be quick, direct and influential with product development teams. Using video of this kind impacts the product as the local, ethnographic meaning is sustained throughout development.

INTRODUCTION

Ethnographic practice is concerned with the understanding of local meaning juxtaposed against one or more theoretical constructs. In an industrial setting, ethnographic practice is often concerned with the understanding of local meaning against the theoretical construct of corporations. However, in a corporate setting, when the output is not a theoretical discussion, but rather a product or service, ethnographic practice must also consider the communication and maintenance of meaning within the corporate construct and with the entire product development team throughout the product development cycle. In theory, this "maintenance work" appears straightforward; however, in practice, this work is deceptively difficult due to the collective bias of homogenous "in-groups." When bias and self interest align with local meaning, the problem is much smaller and therefore, less salient. However, when bias and self-interest are at odds with or do not comprehend the local meaning of target markets, a benign, unintentional dissociation occurs and the meaning intended to be imbued in the product or service becomes lost. The result can be a product that misses its mark, and essentially wastes time, resources, effort and wastes the original ethnographic work that catalyzed quality product development at the start.

The propensity for dissociation of meaning occurs when a corporation has capabilities that could be of service to a group of people, but yet, the corporation is not comprised of that constituency. One example, used as the illustrative vehicle for this paper, is the design of computers for school children. Consider the following: Computing, in the general sense, can have meritorious benefits to children's individual and collective educational experience and yet it is not widely prevalent in schools worldwide (especially in emerging markets). It is

in large part because computers have not been designed *for* schools and therefore the technology offerings do not add value in classroom settings. Appropriate design for schools requires a deep and local understanding of what computing might mean in classrooms. However, groups of engineers and designers cannot collectively (or even for the most part, individually) understand this meaning on an experiential level for schools all around the world. Yet a few ethnographers can, due to the nature of their practice, training and skills. The question, then, is how do ethnographers convey, represent and sustain the local meanings of education as it is transmogrified in the design process? Ideally they will be able to prevent the dissociation of meaning referred to above.

We have been experimenting with short, differential uses of video-based data that makes explicit the meaning of classroom practice as it is now or as it might be imagined with the new product. These "video utterances" attempt to make the local meaning – either direct or transformed – visible, significant and persistent with different constituencies at different times in the development process. These video utterances, coupled with oral and written accounts, create, convey and sustain ethnographic-based meaning with teams in a geographically distributed work unit at a large corporation.

BACKGROUND

Video is a natural choice for researchers to convey meaning to stakeholders in development. Video has been found to portray rich and accurate accounts of the field, inspire a diversity of perspectives, give real and concrete examples of users and capture testing sessions and focus groups (Buur, Binder and Brant 2000; Brun-Cottan and Wall 1995). Commonly, video is either a document of primary data (usually in long unedited segments) or edited pieces that catalyze the dialogue between research, design and engineering (usually through longer documentaries or illustrative clips) (Faulkner 2007; Raijmakers, Gaver and Bishay 2006).

As video sound bites or "YouTube"-style shorts become more pervasive in daily life, video of this kind is also becoming increasingly prevalent in industry. Sunderland and Denny note that video "Ethno-bites" are in high demand due to their dramatic impact and quick implications. The attraction to using "movable, extractable video clips" may be at the expense of losing analytical frameworks and the ethnographic context. However, videos of any length, and ethnographic texts in general, are subject to the "uncertainty and instability of the interpretive meaning that the viewer bring to viewing" (Sunderland and Denny 2007: 266).

In a general sense, the successful construction of meaning from field videos is "dependent on the participation of actors, recorders, editors and viewers" (Buur, Binder and Brant 2000: 1). A number of works have shown that video used in industry is highly interpretive, due in part to the richness of the data it contains. Thus, although it is a very powerful tool for representation, video presentation requires diligence to ensure that a

development team is able to assess the right meanings, in a efficient time frame. In co-viewing and engaging in dialogue, stakeholders can generate meanings together that are balanced as well as novel (Buur and Soendergaard 2000). Teams discussing video must be considerate to not create too many meanings, or ones that miss the mark. The researcher can also place the data in proper context and edit down complex raw footage to align with the time constraints of busy industry teams. The research must be vigilant of the representational burden of what to present and what to not present, and which edits will carry the themes from the research (Faulkner 2007).

As researchers, we have experienced the dangers of data losing its contextual meaning and confounding the research findings. However in our experience, when we use longer videos that retain more context, it works against the goals of quick-paced product development. Long pieces demand time that developers may not have and can distract when time sensitive decisions need answers. As ethnographers, we want to retain the ethnographic texture, even when we are a part of a larger production schedule. We employ the short, contained, often annotated, clips to make convincing design arguments with concrete examples from the field. The short, pithy format, packed with punch and just a little pizzazz, can effectively convey layers of information superimposed in time, and the contextual relief for the data gathered.

Our main objective with video is to show an interpretation of user experience, and use utterances to provide compelling evidence as key product decisions are made. In Latour's work on visualization and cognition, he considers that the importance of visual representation is the effectiveness it has in argumentation. One who cannot represent through visualizations "loses the encounter. His [sic] fact does not hold" (1990: 16). In industry, it is vital that the facts from the field become relevant and meaningful for the stakeholders and decision-makers. The user experience must be sustained as evidence in debates over product definition- otherwise it loses, to financial, legal, engineering or marketing pressures.

Videos have many advantageous qualities for argumentation. They are mobile, but also preserve their character across locations, platforms and browsers. Videos can also be flexibly modified in scale, are cheap to reproduce and spread (using intranets and the Internet). They can be integrated with other kinds of ethnographic texts and industry reports (Pea, Lindgren and Rosen 2006). Most importantly, for argumentation among disparate stakeholders, video can move quickly among groups, languages and geographies.

We do not rely solely on field video to make compelling arguments, but also on videos of reenactments and acting. Learning from performative ethnography (also known as Informances (Burns et.al. 1994) or Focus Troupes (Salvador and Howells 1998)), we use video to capture the recreations of ethnographic data. Informances have been used to explore design issues and generate new knowledge, allowing teams to go beyond simply calling upon research data to make decisions (Burns et.al. 1994; Nencel and Pels 1991). Our videos often contain elements of reenactments and dramatizations of meanings and

(re)interpretations of designs based on the original ethnographic work. Thus, video has been able to capture the field, but it has also been able to record our many interpretations of meaning.

As video utterances are shared throughout the development group, they can make an evocative and convincing argument in a short time with minimum misinterpretation. We are finding that the video utterance, for both its argumentative and representational elements, can be the most effective ethnographic "text" in product development.

VIDEO UTTERANCES

Raw video

Early in the development process, it is important for a work group to gain a deeply felt understanding of the audience for whom they are designing. As mentioned earlier in our education example, it is not feasible for everyone to visit schools. But it is feasible for the ethnographer to bring "the field", with associated meaning and context (albeit more limited), to the engineer.

In our research, we found that classrooms are dynamic places. To illustrate some key values to the engineers, like noise level, we cut small clips of raw footage from classrooms. We then instructed the engineers to use a strategic eye to look at bodily movement and the volume level during a lesson. Within one handwriting lesson, students from China exhibit a binary contrast: when called upon by the teacher, together the class gave loud, animated responses, but at all other times they bodies were still and silent. Compared to the United States, in more or less the same handwriting lesson, the students moved about in their chairs and classroom had a consistent myriad of voices.

Classroom Noise: *These two classrooms appear to be very similar. The students in China (left) and U.S. (right) are both practicing handwriting in the air before they use pencils and paper. However, when playing these two videos together, the developers take note of differences in volume and student self-discipline between the two classrooms.*

In these clips, we wanted to illustrate just one element of the culture of schools worldwide. The videos conveyed important animation and audio that still pictures could not. Additionally, these one minute videos were more descriptive and more complete than textual narratives. Just telling this story takes time, and lacks an immersion in the dynamic feel of the classroom.

In showing this clip, viewers might misinterpret one important aspect of students in China, and could label them quieter and more disciplined than other students. Here, our videos needed additional scaffolding. The "silent clip" from China was complemented by research data of these students outside class. While the Chinese students were quiet and focused during lessons, the moment the class was over they begun vibrant conversations. Outside of class, but still at school, students were extremely social and interactive with their peers.

The development team was able to conjecture that the laptop needed to serve in distinct but important situations: first, it should serve as a classroom learning device performing in highly structured class time, and second, it should serve as a social device also supporting exploration and collaboration with other students. Some physical features on the laptop needed to effectively support these activities. In a silent classroom, whether a typical Chinese classroom or a test taking situation in the US, thirty laptop machines creating the inherent noise that a computer makes will overwhelm both the room and the single voice of the teacher. This video changed the perception of laptop noise and enabled design around quieter devices.

Noise level in the classroom is just one of many key observations that were able to come about because of the raw video footage obtained from classrooms. A readily noticeable activity in classrooms with laptops is the process of charging and storing the devices in a cabinet. To convey the need for the laptops to accommodate frequent storage and retrieval, we used video clips with the engineering teams. Here, pictures or narratives would not have conveyed the real time process of moving the machines to the cart and plugging each of them in individually. Moreover, we were able to simultaneously showcase the burden on the teacher and the misuse of class time by other students who were not involved in the lengthy process. It is interesting to note that we often use video to illustrate how much effort users put into tasks that should be easy to do. When we show these clips, the viewers become exasperated with the length of time that the process is taking, often much sooner than the teacher or student will.

Returning the laptops to the cart: *Students in the classroom are left to their own devices while a few students and the teacher attempt to plug in and store each laptop.*

Engineers were able to see that this process created new, transitional moments that add undesirable inefficiencies to an otherwise tightly scripted classroom environment. In order to support this frequent practice, certain features needed to be considered and designed appropriately. The integrated handle allowed students to carry the laptops effectively, while the location of the charging port, the length of the cord and the charging light indicator also came under review. This video was able to make salient the nuances of this common practice. The solution thus required slight individual design solutions, which together avoid the introduction of needless inefficiency in the classroom.

Re-Creations

As the development process proceeds, decisions move from strategies and concepts to execution and details. The team must balance the demands of local meaning against dynamically unfolding business and engineering realities. Discussions about specific features and capabilities can be influenced by the meaning found in video utterances because they are comprised of the field research data. We have been able to use video to create *new* utterances that shape and convey the intended experiences for the product. Video from the field is purposed and edited, and sometimes recreated, to convey new meaning in a relevant context.

Research introducing technology prototypes yielded key user experience issues with the technology planned to support handwriting and touch usages. While we tested the technology with many students and teachers, the summary of data was not convincing until

simple video presentation made the same points.   In the first video, we juxtaposed two handwriting experiences: one, where the student struggled to write legibly, and the other, where the teacher was allowed to rest the side of her hand on the screen. The short video led the team to agree that a quality screen must recognize the pen tip but not the side of the hand. In the second video, we illustrated what the experience should be like, based on the positive experiences that we saw in the field. The videos permitted management and the engineering teams to immediately understand the proposed context of use and build a personal experience with touch screen usage which they could draw on in development. The videos secured handwriting technology as a key feature, leading the engineering and research team to work in partnership to evaluate several potential solutions.

Handwriting Utterances
Left: Video compares the quality of real-life handwriting experiences.
Right: Researcher demonstrates palm cancellation.

Another important feature of our product is designing for the inherent roughness of young student use. Surviving a drop off a desk or a toss on the floor in a backpack are values that were uncovered during research. The engineering standards for product drop testing were at odds with what it meant to be rugged in the classroom. An industry drop test outlines a unit falling from specific distances, at various angles, against specific flooring. The industry standard test is necessary, but from a user experience perspective, we needed additional level of durability tied to enabling new usages letting kids feel free to behave the way they do with other objects.

While in the field, researchers were only able to capture limited instances of rough use on video, but interviews with teachers, administrators and parents revealed instances and values associated with the importance of rugged in the classroom. The meaning that was generated from our field work needed to be captured and conveyed to the other team members, in a way that was as dramatic as the stories from the field. Since actual drops are rare but could be catastrophic, plausible reenactments based on stories from field research were helpful in communication. In this case, we use both researcher reenactments and student reenactments to show the laptop falling off chairs, flung out of hands, swung around in circles and catapulted off binders. Showing plausible situations in the field made a

noticeable change in the value the development team placed on ruggedness, making the case that the device must exceed industry standards for notebook PCs.

Dropping Performances
  Left: Researchers drop the laptop from adult height
  Right: Elementary school student reenacts dropping senarios

Text, Arrows, Circles, and Other Annotations

In the handwriting example above, you may notice the use of arrows, dual pictures and text to help illustrate the experience. Earlier in this paper we also referred to the burden placed on the researcher when deciding which edits represent the themes of the research. In some ways the multitude of editing choices can complicate the meaning of a video from the field, but for shorter pieces some editing techniques can provide important scaffolding. In our practice, we use small instances of video, edited with text overlays, arrows and other identifiers to indicate issues in the contextual relief that may be lost when cutting down the footage.

In one specific instance, we used a video to demonstrate the aspects of poor wireless networking in the classroom. In the first video, students had trouble accessing the wireless network. It showed students moving closer to the wireless access point. Thus, the students raised the computers over their heads, or walked all the way across the room to the wireless access point. This video showed how clearly undesirable of a situation this was during the middle of a class. Arrows helped to identify which behaviors to look to, while text helped to explain what the students were doing and why. Clearly, the development team could see that device that was meant for learning quickly became a vehicle for distraction.

Our second video highlights the networking problems that occurred when all students tried to print documents at once. Most printers built for office settings spool interspersed printing jobs. In a classroom, it is common to find all students printing at the end of a lesson. The printer stumbles over the many simultaneous requests and, in this case, stops working at a single request. This video follows the teacher as he tries to trace down the

machine that is responsible for the printer jam. Watching this video in its entirety makes a substantial impact on the viewer, who can feel the frustration grow over fifteen minutes of real time. But, we know that this clip was much to long to engage the engineers. To illustrate the elapsed time, we used text panels, and considered superimposing the time code. These panels explained actions that might have otherwise been obscured by the time lapse where the video was not shown. After these were included, the time code would have taken extra effort when we had already produced the intended frustrating effect for viewing. Therefore it was left out.

Wireless Problem :*Students try to connect to the wireless signal by moving their computers directly in front of the WAP.*

Printer Problem: *Text helps to explain the classroom activities when the networked printer overloads. The viewer experiences minutes of wasted class time on technical problems*.

It was not only the poor performance, but the exact nature of the poor performance that mattered to the engineers. As the development process enters the testing stage, researchers can be present to see and understand problems and challenges in situ, but again,

the engineers often do not have this luxury. Framed video helps to bring simple and poignant evidence of a problem to the engineering teams. To get the video out of inboxes, and the problem prioritized, we take into account that engineers often do not have time to consider videos in their daily work. We found that shorter videos and simple annotations increase the number of viewers and the impact of our research. Cases like this qualified the strategic focus around networking solutions. The videos encouraged a hardware and software shift for the following device iterations and the most current networking technology, such as 802.11n wireless LAN, was considered.

We have seen evidence that the meaning made in the field persists when it is captured by video. It is common to hear designers and engineers refer back to their experience with a topic (even in abstraction) that was captured on video and make *locally* relevant decisions. While the video is just a representation, the context and conversation around the video make it effective in embodying meaning, and also translating that meaning from the school to the corporation.

Reactions

As we with short video, we consider a questioned posed by Sunderland and Denny: "Will those videos that 'close down debate' become the standard over those longer pieces that 'maintain the animation, dynamics of the lived experience'?" (2007: 268).

With a demanding product development schedule, the simple answer is yes. We hope that ethnographic video would simultaneously exist in longer formats that retain an ethnographic prose meant for inspiration and interpretation, at the same time that video utterances provide clear implications. The reason for this is simple: in the office the user experience can get lost along the product road map. Using video at every stage in development can be an incredibly powerful way to contextualize human behavior in the minds of the engineers, designers and management. In doing this, we realized that to maintain the ethnographic impact, the videos become shorter stories.

The nature of ethnographic work can influence decisions about strategies and specific product features. However, research exists as only one of many factors that influence decisions. Often in our work, hardware, software, marketing, legal, finance, design, and research gather together to define the product and each sway design in favor of particular high priority issues. Finance pushes for price; legal steers clear from litigation; and hardware and software ground us in the realities of available technology. In these debates, we have used our video utterances to bring the field to life and put the user in the forefront of the stakeholder's minds. Powerful, short videos can help create an appropriate balance between conflicting demands. The clips are constant bridges back to the original intentions behind the product strategy. At many critical stages, video has helped 'win the room' of stakeholders and make critical product decisions with the user experience in mind.

CONCLUDING THOUGHTS

We have used short video utterances to create new possibilities in our products, identify key features and capabilities, and illustrate issues found during research. By using video, instead of relying only on pictures and words, we found that the communication of key issues was clearer, arguments were settled more quickly, and team members were able to agree on what the local meaning meant for the product. Most importantly, by using video with appropriate scaffolding, it kept the ethnographic work relevant at many stages of the product development, and for different stakeholders. In our past work, as in other studies, the communication of local meaning was restricted to ideation sessions at the beginning of the development, or to document testing at the end. Now, using video utterances, we were able to consistently address the issues as engineers or designers encountered them throughout the process. An utterance can convey local meaning in an appropriate and consumable way because of its short and self-contained nature.

Cataloguing and preparing video for this purpose takes time and resources. Therefore, we do not convert *all* the video from the field into a database of utterances. We cannot always predict what issues will be hotly debated, or, what nuances from the field will be most important. Instead, we closely follow product team development and extract video from which relevant discussion can emerge, opportunities for new features are exposed, or patterns of behaviors can be addressed. We contain video in short clips, edit as needed, and discuss with appropriate members of the team. We found that by putting time into creating meaningful video clips, the development team ultimately saves time in making better decision earlier and not having to revisit decisions as often. It has been our experience that team members communicate the meaning held in the video, and, in the end, develop a product that is better suited for the intended value propositions.

We contend that in corporate settings, video is fast becoming the "new text," a mechanism for creating, conveying and sustaining meaning across constituencies and over time. While there remain significant methodological and practical issues around the time and effort required to produce and (re)edit video, we're finding the tradeoff for communication and contextualization to be very promising.

FUTURE WORK

In our future work, we hope to increase our use of video utterances and further document the impact it has on our team and the products. To increase our use we will be looking at new ways to efficiently create and disseminate video. With the popularity and ease of YouTube, we see a great potential for video utterances to be distributed in a similar fashion over local intranets. We will be looking into best practices for encouraging independent consumption of video material. It is our hope that we will be able to make video available to team members so that they can view, discuss, and refer to that local meaning with ease.

REFERENCES

Brun-Cottan, F. and Wall, P.
1995   Using video to re-present the user. *Communications of the ACM*, 38(5): 61-71.

Burns, C., Dishman, E., Verplank, W., and Lassiter, B.
1994   Actors, Hairdos & Videotape – Informance Design. *CHI'94 Conference Companion, ACM.* Boston.

Buur, J., and Soendergaard, A.
2000   Video card game: an augmented environment for user centred design discussions. In Proceedings of *DARE 2000 on Designing augmented reality environments*, Elsinore, Denmark, 63-69.

Buur, J., Binder, T., and Brandt, E.
2000   Taking video beyond "hard data" in user centred design. *Proceedings of PDC CPSR*, New York.

Faulker, Susan
2007   Real Reality TV: Using Documentary-Style Video to Place Real People at Center of the Design Process. *Intel Technology Journal: Designing Technology with People in Mind.* 11-21.

Latour, B.
1990   Drawing things together. *Representation in Scientific Practice*, MIT Press.

Nencel, Lorraine and Pels, Peter (editors)
1991   *Constructing Knowledge: Authority and Critique in Social Science.* London: Sage.

Pea, R., Lindgren, R., and Rosen, J.
2006.   Computer-Supported Collaborative Video Analysis. *Proceedings of the 7th International Conference on Learning Sciences.* Indiana: International Society of Learning Sciences.

Rajimakers,B., Gaver, W.W., and Bishay, Jon.
2006.   Designing Documentaries: Inspiring Design Research through Documentary Films. *Proceedings of DIS 2006*, University Park, PA: ACM Press.

Salvador, T. & Howells, K.
1998   Focus Troupe: Using drama to create common context for new product concept end-user evaluations. *Proceedings of* CHI '98 Conference on Computer Human Interaction.

Sunderland, P.L., and Denny, R.M.
2007   *Doing Anthropology in Consumer Research.* Left Coast Press, Walnut Creek.

Design Rituals and Performative Ethnography

JOACHIM HALSE
The Danish Design School

BRENDON CLARK
SPIRE – Mads Clausen Institute
University of Southern Denmark

This paper proposes a course for ethnography in design that problematizes the implied authenticity of "people out there," and rather favors a performative worldview where people, things and business opportunities are continuously and reciprocally in the making, and where anthropological analysis is only one competence among others relevant for understanding how this making unfolds. In contrast to perpetuating the "real people" discourse that often masks the analytic work of the anthropologist relegating the role of the ethnographer to that of data collector (Nafus and Anderson 2006), this paper advocates a performative ethnography that relocates the inescapable creative aspects of analysis from the anthropologist's solitary working office into a collaborative project space. The authors have explored the use of video clips, descriptions and quotes detached from their "real" context, not to claim how it really is out there, but to subject them to a range of diverse competencies, each with different interests in making sense of them. Hereby the realness of the ethnographic fragments lie as much in their ability to prompt meaningful re-interpretations here-and-now as in how precisely they correspond to the imagined real world out there-and-then. We propose that it is precisely the investment of one self and one's own desires and agendas that lifts an ethnographic field inquiry out of its everydayness and into something of value to further-reaching processes of change and development of attractive alternatives.

INTRODUCTION

In a recent paper, Nafus and Anderson (2006) explored the discourse of "the real people" as an important feature of the epistemic culture of ethnography in industry. They discuss the canonical use of ethnographic photographs and quotations from the field as powerful means of trumping even insightful argumentation, because they purportedly state the realness of the presented ethnographic argument in indisputable terms; in terms of the real: these people are really out there. Situated themselves among engineers, business strategists, and management experts, Nafus and Anderson acknowledge how important the "real people" discourse has been for strategically positioning ethnography as a relevant competence in industry (2006:3). It positions the professionally trained ethnographer as someone who can provide access to the hinterlands of the real people, where products are actually used in authentic everyday life, in ways the client would never have imagined. The

problem with this discourse (besides that it does not correspond with the epistemological assumptions of many ethnographers, who are usually reluctant to refer to "the real" without the quotation marks, and who usually consider themselves and their clients as real as their informants) is that it leaves the analytical work of the ethnographer invisible, and thereby making ethnography look like mere data collection.

Already in 1994 Robert Anderson from the Rank Xerox Research Center in Cambridge responded to the ongoing discussions about the value of ethnography in systems design. He argued that many in the systems world have seen ethnography only as "information gathering and have missed the critical importance of representation" (Anderson 1994:160). While getting to know users and their knowledge and practices are important tasks for design, "you do not need ethnography to do that; just minimal competency in interactive skills and, a willingness to spend time, and a fair amount of patience" (Anderson 1994:155).

Both of these papers, written ten years apart, raise the question of whether the 'real people' refrain, and the representationalist knowledge practices it prefigures, will continue to characterize ethnography in industry. Like all three of these authors, we believe there is more value to be drawn from anthropology than data collection. In the present paper, we therefore take the invitation to chart an alternative path than that of exaggerating the real people refrain. We propose a course for ethnography in design that problematizes the implied authenticity of "people out there," and rather favors a performative worldview where people, things and business opportunities are continuously and reciprocally in the making, and where anthropological analysis is only one competence among others relevant for understanding how this making unfolds.

Our experiences are drawn from research and design projects in collaboration with partners in industry and public institutions. They include ethnographic engagements with the fields of interaction design, system development, architecture, education, and public policy, and generally belong to design-oriented areas of industry. The projects have been carried out in the Scandinavian tradition of Participatory Design and accordingly our ethnographic engagement with users has aimed more at eliciting their active participation in the projects, than at generating knowledge *about* them, as objects of study.

Let us start out somewhat paradigmatic: we believe the world is in a continual process of becoming through our engagement with it, and the user is not authentically "out there" to be discovered independently of our interest in the discovery. The user emerges somewhere in the meeting between our ethnographic search for "real people," the practice of the particular participants in our study, and the projected interest in them posed by project stakeholders as possible new areas of use.

When Nafus and Anderson claim that "...the stand-alone quote is in fact the truth that conceals that there is none. It points to a seemingly external context that is being constructed inside the corporate meeting room," (2006:11) we could not agree more. However, this creative work of imagination and construction that goes on in the corporate

meeting room when clients are confronted with fragments of the surprising and strange ways of the users need not be read as a regrettable delusion. The world-constructing practice that can be prompted by an ethnographic stand-alone quote, image or video clip that point outside the meeting room is precisely what we are after. It has not led us to reduce our use of these rhetoric devices that purportedly connect us to the "real world". In fact, we work out of a research tradition that excels in stand-alone quotations and context-free video clips (e.g. Buur and Søndergaard 2000). Let us explain and demonstrate how techniques that are widely used to establish the ethnographer's authority of knowing what is "really out there", can be used in more playful performances of realities in the plural.

Rather than lament that the anthropological analysis is bracketed off in the excitement over quotes and images, we propose a performative ethnography in design that relocates the inescapable creative aspects of analysis from the anthropologist's solitary working office into a collaborative project space. We have used video clips, descriptions and quotes detached from their "real" context, not to claim how it really is out there, but to subject them to a range of diverse competencies, each with different interests in making sense of them. Hereby the realness of the ethnographic fragments lie as much in their ability to prompt meaningful re-interpretations here-and-now as in how precisely they correspond to the imagined real world out there-and-then.

The motivation for this paper and the work that lies behind it is a reaction against overly realist ideas of what ethnography may do in industry. To explore how *performativity* may provide us an alternative path from the "real people" refrain, we will begin with clarifying what kinds of performativity we are concerned with, and then proceed to present two particular examples of performative ethnographic practices in design.

TWO STRANDS OF PERFORMATIVITY

In distancing our ethnographic practice from providing the facts, or acting as truth witnesses for example in design negotiations whether or not a specific product feature is relevant for the real user, we will follow two strands of performativity: first, a broad performative ontology to conceptualize the practice we as ethnographers inquire into as an ever-evolving and unsettled becoming that resists reification in, for example, personas or segments; and second, performance theory from the performing arts to better understand the social interactions that are involved in playful explorations of how the world *could be* thought of when ethnographic material is presented to industrial audiences with diverse interests.

Ontological Performativity

Looking at performativity in the broadest sense of the word implies that everything continually comes into being through its social and material performance. Such a perspective is employed to capture the process whereby phenomena are produced or reproduced through their particular performance. In *How To Do Things with Words* (1962) John Austin

presented the concept of the performative utterance. It was a reaction to the logical positivist focus on the truthfulness and verifiability of statements. As a category of utterances without truth-value, the performative does not describe but acts on the world, hence the title of the book. In other words, by the utterance of the word, the act is performed. Austin also launched the more encompassing idea that all utterances are in fact performative: they *do* something.

Since Austin's pioneering work with performative utterances, post-structuralism has given rise to fundamental questions to the distinction of categories, beyond linguistics. Movements in science and technology studies, actor-network theory, feminist theory, cultural studies, social and cultural anthropology have developed a general analytical understanding that distinctions are not given in the order of things, but rather seen as outcomes or effects. With the notion of relational ontologies, the fundamentally semiotic insight that entities take their form and acquire their attributes as a result of their relations with other entities is applied to anything. In light of the notion of performativity, the discussion of what is really out there is abandoned in favor of a discussion of how things continually become what they are in and through their performed relations with other things. Since entities have no inherent qualities, the question is how, then, do things become what they are?

Performative ontology, i.e., that things become what they are through their performance, has been developed especially within Science and Technology Studies. Pickering, for example, suggested a "performative idiom" for the study of scientific practice (1995) and thereby articulated a new attention to the production of scientific facts. Similarly to what the performative idiom has done to understand the production of scientific facts, we suggest can be done to understand the production of designerly facts such as "the users and their practice" or "the client and their resources." These are entities that appear very real, yet they come into being through meticulous processes of performance. From within feminist theory, Butler has shown how gender works as a performative—constituting the act that it purportedly describes (1997). While Butler focused on the repetitive nature of gender performances, here we are more concerned with the possibility of actively inducing change as an emergence among actors.

The post-structuralist preoccupation with how things continually become what they are suggests the transformative power of performance. An important consequence of performativity is "that everything is uncertain and reversible, at least in principle" (Law 1999:4). While it has been demonstrated many times that it matters how things become as they are performed, it is still an open question how this insight may be brought to bear on our understanding and practice of ethnography in design. Could we improve the efficacy of the design process by conceiving of it as a performance? What resources do we as ethnographers have available to perform the social and technological interactions of the future? With these questions we take ontological performativity to be valuable not only as a means to analytically understand ethnographically experienced practice, but just as importantly as a relevant contribution to a reflexive design anthropological practice. To pro-

actively embrace the idea that everything in principle is uncertain and reversible implies, in terms of ethnography in design, encouragement to consider the design process as a conscious effort to enact particular modes of reality and people's concerns about them.

The relational ontologies of use and design imply that the one does not come before the other; rather, they necessarily constitute each other. There is nothing paradoxical in exploring the possibilities of use through the practice of design. It is impossible to think about design without already implying some sort of use, and vice versa. This prompts us as design oriented anthropologists to create opportunities where use practices can be performed differently; where they can be explored in terms of design possibilities, and vice versa.

Confined Dramaturgical Performativity

The anthropology of performance has to a large extent evolved from the study of rituals and symbols. Let us begin with ritual as it has been anthropologically conceived. As early as 1909, Van Gennep published his classic study of Rites of Passage (Gennep 1960), i.e. ritualized changes of social or cultural state, as for example becoming human, becoming adult or becoming married. Van Gennep described the general structure of initiation rites as following three ritual stages: that of separation (the person to be initiated is detached from society), that of transition or liminality (the state of the person is ambiguous while approaching the new state and having left the old) and that of reincorporation (the person is re-introduced to society in the new state). Victor Turner later expanded these ideas, focusing especially on the liminal period, which he also identified in other types of rituals than rites of passage. He was concerned with the transition as a process, as a becoming and transformation. One of Turner's central points was that the ritual suspension of normal order is a necessary step for achieving the desired changes of state. Turner described the temporary liminal state of the indefinable transitional being as "betwixt and between," in the sense that it is at once no longer classified (for example as a boy) and not yet classified (as a man) (Turner 1996).

The borderline between the anthropology of ritual and performance theory has since been famously traveled and conceptualized by Richard Schechner in part fueled by Turner. Schechner used insights from the analysis of ritual to experiment with actual dramaturgical performances and thereby challenged and developed the established notions of stage, actor, script and audience. Of particular interest here, are Schechners observations of how the act of performing can transform both the actor and the audience. The act does not simply represent another mode of reality; it plays *with* modes of reality. Through various techniques for setting the scene, prompting improvisation, and for inviting audience participation, Schechner has been a major influence on both the theory and practice of the performing arts.

Employing The Two Strands Of Performativity In Design

The two ways of employing "the performative" outlined above stem from different strands of discursive practices. One of the differences between the confined dramaturgical sense (e.g. Schechner 1988) and the all-encompassing ontological sense (e.g. Barad 2003) lies in whether or not transformation and creation through performance necessarily happens all the time or mostly in special occasions arranged for social display. One of the virtues of the ontological performativity is that it forces us to extend the analysis from the explicitly declared design activities to include also the broader relations implied by constructing for example an image of "the creative user". In design workshops, the designed artifact is not the only thing being performed. The people who have accepted to engage in the project as "themselves," as possible end-users, constantly become what they are through their personal and professional activities, decisions and relationships. In this vein, the engagement in a research and design project is yet another opportunity for the participants to re-invent themselves and their professional or personal practice. Furthermore, technologies cannot in any simple way be defined by their mere functional properties; technologies become what they are through the particular ways they are contextualized in various changing patterns of use and abuse. In general the ontological performativity has proven productive for the challenging and questioning of apparent identities, claims to authenticity and acts of essentialization. However, the general metaphysical assumption or conviction that all things become through and only through performance entails a risk of trivializing the conscious act of playing with possibilities through performance.

If everything is performative, then it is nothing special to state that particular collaborative design events work by performing that which they want to create. Our understanding of collaborative design is in line with Binder's conception of the dynamics of participatory design: that it works by performing that which it wants to create (1995). But in light of ontological performativity, this conception may seem trivial, because *everything* by definition is created through its performance. If everything is enacted, then facilitating a particular user's enactment of a future scenario merely states the obvious.

Consider a design-oriented ethnographer who has carried out field visits, prepared design materials, and staged a design workshop with relevant partners. She may intensely want the small future scenarios to become something more steadily materialized: a working technology that people will actually use. When she is sometimes unable to move other entities and make things happen, despite the presence of all the ingredients that make up a usual actor-network chain of translations: a special room, furniture arranged for action, people with resourceful development organizations behind them, practice made partly controllable through inscriptions in text and image, etc. it almost amounts to an insult to her efforts to ask the prototypical analytical question of ontological performativity "how are things performed into being?" because the empirical problem is precisely the opposite: "why was this thing *not* performed into being?"

To approach the intricacies of exploring ethnographic field material while at the same time looking for possibilities for it to become something else, we turn to performance theory in the more confined sense, where performances constitute a special class of events consciously arranged to achieve specific ends. A central characteristic of theatrical performance theory as opposed to the post-structuralist understanding of performance as an ontological condition is its concern with *the subjunctive*: the famous *what if.*

THE DESIGN EVENT AS A RITUAL PERFORMANCE

Let us suggest an understanding of collaborative design events as a kind of dramaturgical performance. To qualify this suggestion we shall first point to a classic connection between theatre and the everyday.

Everyday Dramas

Anthropology, in particular, has treated the actual lived practices of people through a performative perspective, showing how humans are always involved in constructing and staging our identities. This, of course, has not been to suggest that practices are in any way fake, but rather that we all enact our personal and social realities on a day-to-day basis. From within anthropology, Turner eminently showed how these performances of the everyday took the form of rituals and social dramas.

While performativity in the post-structuralist sense constitutes an entire ontology, or more precisely ontologies, Erving Goffman used drama and performance as a metaphor for social life. Since Goffman's *The Presentation of Self in Everyday Life* (1958) the performances inherent in everyday life have been a common focus for the social sciences in general. Goffman was concerned with the dramatization of the individual, and demonstrated how people in everyday interactions maintain or establish a given definition of the situation. The achievement of the collective definition of a given situation is dependent upon the participants investing their image of themselves—their face—in the performed situation. This collaborative act of maintaining images of self, e.g. to not lose face, Goffman referred to as facework. In the present context of ethnography and collaborative design, the investment of the image of self should be taken in its broad sense including professional skill, technological competence and preferences, organizational resources, personal values, concerns, and career goals; in other words, it is not restricted to personal identities. In Goffman's view, this kind of interaction takes place in a wide variety of situations; everything is more or less improvisationally staged in response to a social script and with a sense of an audience providing feedback in one form or another.

There is a transformative potential in the encounter between script and action, insofar that situations can actively be established where alternative definitions of situations are collaboratively produced. There is, at least in principle, the possibility of achieving a durability that extends alternative definitions of a situation beyond its immediate performance.

Design Rituals

Collaborative design workshops often work by playfully performing things into being that are still beyond the point where they can be fully articulated. Let us consider this in dramaturgical terms. Through rehearsals, improvizations and the inscription of imaginary meanings onto props the design event, like theater, institutionalizes the liminal space. Here the dominant mode is the subjunctive, the what-if. The process of producing a future scenario is guided by a similar logic to that of a theatrical rehearsal: trying out different kinds of user interactions with technology to see if they appear to be attractive performances of the world. Referring to theatre Schechner stated similarly: "It is during workshop-rehearsals that the "if" is used as a way of researching the physical environment, the affects, the relationships—everything that will sooner or later be fixed in the performance text." (Schechner 1985:: 102)

The design workshop as a whole is enacted in ways similar to the rite of passage: as a momentary suspension of the everyday order, as betwixt and between, in order to prepare the subject for transformation. In the design workshop it is not a social individual that is to undergo transformation—it is practice as it meets technological artifacts. Practice and technology are thus separated from their normal surroundings, drawn into a liminal space and time where they can be symbolically "broken down" as Turner expressed it, in order to facilitate their transition to a new state.

A central challenge for performative ethnography in collaborative design processes is to avoid contributing to reifications of the presented ethnographic material. We have sought to maintain an openness towards mutations of the ethnographic material and let it become part of the continuous unfoldings of practice, rather than testimonies of the past. The goal we set for our efforts in between ethnography and design is thus to create a design space that is at once open for exploring the everyday practice of a given setting or group of people, and at the same time to bring about a lively sense of what it might become in light of the given resources.

Let us consider the design workshop a performative event. While we are quite sure the participants in our actual design projects do not see themselves as performers in any theatrical or ritual way, we would like to push the comparison. The anthropological gaze upon the practice of collaborative design renders visible the magico-ritual character in the production of the New. There is a fit between what the design workshop and the enactment of future scenarios encode, to what theories of performance and ritual are attempting to analyze.

While we look at design events as performances and apply Schechner's concept thereof, this is not to say that they are about entertainment. On the contrary, they are explicitly about driving design processes forward by generating new ideas and producing useful concepts for new artifacts. As performances, the design events seek to change people and things, technology and practice through the witnessed enactments of what may be.

Performance theory and practice have moved steadily from a concern with classic theatre towards employing performance as a method of cultural reflection and change. This movement is for example seen within the branch of *performance ethnography* where performance is framed as "a critical reflective and refractive lens to view the human condition and a form of reflexive agency that initiates action" (Alexander 2005:412). What we are after here is the intent of allowing the participants in, and audience of, a particular performance the opportunity to come to know culture differently, and seek the openings for change that sometimes emerge from this. Although performance ethnography is more often associated with social movements than with design explorations, Alexander's description of its virtues is relevant for the design anthropological practice outlined here: "The power and potential of performance ethnography resides in the empathic and embodied engagement of other ways of knowing that heightens the possibility of acting upon the humanistic impulse to transform the world" (Alexander 2005:412).

In light of performance theory the problem of how design workshops seem to encapsulate a small part of the future now seem less paradoxical or controversial. In some rituals the actualization is the making present of a past time or event. The ritual makes the myth present by showing it as happening, here and now. Design workshops in their varieties depend upon performative transformations of time and space. However incomplete or temporary the transformations may be, they enact a specific "there and then" in this particular "here and now". This, of course, is not to say that some future reality is here, but it playfully suggests that if it appears attractive and possible to the present audience, the future might be characterized by this mode of reality.

TWO CASES OF PERFORMANCE

As an introduction to the two cases of performance presented below, let us broaden the focus on design from a singular event secluded in its intention to generate design concepts, to a variety of project related activities whether more representative of analysis, brainstorming, or building. Design takes place not only in formal events such as a collaborative workshop, or in formal surroundings such as a design studio, but in the interstices of everyday life, whenever we realize our practical and imaginative capacity to transform the circumstances of our lives into scenarios partly of our own choosing. The design event does, however, as we will turn to below, present a unique opportunity to mobilize at once resources and concerns that would otherwise remain more distantly related.

The problem of establishing a space that is out-of-the-ordinary, in order to view the well known in a new light is ubiquitous for design. As we have seen from Clark's work on participatory design, a liminal space has to be established across a wide spectrum of stakeholders throughout the project space: in the informal talk in the corridors as well as in the more consciously staged design activities (Clark 2007). To get started thinking and talking about the new, a liminal space must be established. Here we focus on examples of social arrangements for how they are arranged to appreciate and induce a liminal state for the various participants. That is, how are the participants not only found to be betwixt and

between various roles, on the one hand, and how are the participants encouraged through a staging of performance, to playfully explore what could be possible.

Re-Enacting maintenance work

The following situation took place at the Danish company Thy:Data which develops software solutions in partnership with Microsoft Dynamics.

Figure 5. Software developer acting as a machine operator in a design workshop.

Carsten (senior software developer acting as machine operator Jeanette): "I arrive at work, take my tablet PC here by the black-box machine and log in as Jeanette… I press "arriving", and it is then registered that I have arrived at work. I press "start task" here on my task and start up my machine and take care of the belt with black machines… no, (corrects himself) black boxes… And it works well... (pause) A box tips over!"
(From video of workshop, November 2005)

As can be seen from the image, the software developer is not actually operating a machine and a conveyor belt on the shop floor of a snack manufacturing facility. He is in a meeting room and with the machine and the belt represented by a line of black cardboard boxes on a regular table he *pretends* to be in the situation of a machine operator. While he carries out the bodily gestures of operating such a machine, he also handles a piece of white foam that he pretends is a tablet PC running an imaginary new software application. In the course of acting out the specific interactions with the new application the software developer sometimes hesitates, because he realizes that the paper interface on the white foam does not provide the relevant options for the situation. During the performance of this scenario the software developer is confronted in very practical terms with his own design. The audience, or in this case the video camera and the expected audience, raise the demand on the performer to act competently. And while the developer can be excused for not knowing exactly how to operate production machinery, the expectations are higher that he can make sense of the interface that he has previously conceived for the IT system. The senior developer and the lead program manager who are the primary forces in this performance work hard to make the mocked-up system interface match the specific situation—or do facework as Goffman would term it—to achieve a collective definition of this meeting room situation as if it were a desirable situation at a factory shop floor.

Obviously, we have not just walked up to any senior software developer and asked him to dress up and begin to push imaginary buttons on a piece of foam. A lot of work preceded

and enabled this performance. The situation played out is actually a re-enactment of a situation that took place during our initial ethnographic fieldwork on a particular factory shop floor, that of KiMs, a Danish snack manufacturer. Our first presentation of this field material to the client audience had been a deliberately incomplete account abundant with fragmentary quotes, images and videos. When we think of these ethnographic fragments as design materials in light of performativity, video clips from the field are performative utterances, rather than representations as such. Alongside the technological components and foam shapes in the design workshop they do not represent anything as much as they point to related entities, and their main quality lies in this direction of other's attention. The statements about other entities implied by the use of design materials are thus to be considered not as speech acts, but as object acts. In the specific case of video clips, we may usefully employ the term *image acts* introduced by Blackwell (1998) as a paraphrase of Austin's *speech acts*.

As Nafus and Anderson observe, the ethnographic fragments point to "a seemingly external context that is being constructed inside the corporate meeting room" (2006:11). - Not *entirely* inside the meeting room we would have to add. Rather, the ethnographic reality is continuously being constructed in the complex relationship between observed and observer. Let us consider this relational construction as a double movement, where the seemingly external context (that of maintenance work at KiMs) is not granted a higher degree of reality than the corporate meeting room. By staging a re-enactment of the presented ethnographic fragments it is in fact possible to involve highly competent non-anthropological stakeholders in testing out how this foreign situation could be understood. This amounts to inviting a plurality of competences into the construction of analytical hypotheses, instead of insisting on the anthropologist's privileged position for defining what the world really is.

Figure 6. Maintenance work enacted in situ by service technicians and subsequently re-enacted by software professionals in a meeting room. It is clearly not the same situation, yet not entirely different situations either.

Performing collaborative analysis

In our second example, designers and researchers are enrolled into a collaborative analysis session featuring ethnographic material during a design workshop. The session involves a first attempt to make sense of a complex field. In the project, Design for Cultural Pluralism (CUPL), the university's industrial design department, in collaboration with the local Swedish municipality, sought to explore how design could support cultural integration among middle school-aged children from non-Swedish descent during their school and afterschool activities.

At this stage of the project, the team began understanding how the broad issue of cultural integration became visible in the lives of middle school students—when and how culture was considered advantageous or problematic by children and the adults supervising their activities. After the initial fieldwork among the activities of young people (i.e. in a youth center, classroom, library and sports club), the team arranged a half-day design workshop with scholars from the university's Informatics department and Department of Interactive Media and Learning. The purpose of the activity was three-fold: to introduce the design team to an analytic stance toward their field experiences, to expose the team to disparate perspectives on the material, and to begin exploring potential technological possibilities.

As can be seen in the text below, the field accounts described not only the research participants, but also the research encounter between the design team and the participants. During the workshop, the six participants were asked to engage in a variety of tasks in relation to the ethnographic accounts. The tasks were sequenced so that the participants would begin describing their individual perspectives, discuss in pairs, and ultimately introduce them to the group in plenum as a witnessed performance.

The three pairs of participants sat around a table with three large pieces of paper on the table between them like a three-part game board. Each pair had four or five text cards in their hands—each card started as a one-page description of field material and was folded into an a-frame card that could stand on its own (see diagram below). The facilitator asked each pair to introduce one of their cards to the group by simultaneously describing it and placing it on one of the game boards by either adding it to a pre-existing category, identified by a group before them, or to purpose a new category for the representation.

Read silently and write comments	**Discuss in pairs**	**Write two main points and fold**	**In plenum, negotiate theme through examples**
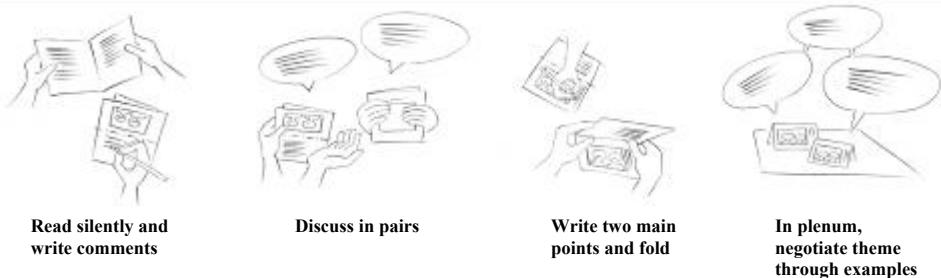
Figure 3. A sequencing of reading, writing, and discussing, supported by the folding of a sheet of paper turned into a freestanding text piece with multiple authors.

It is now Mia and Erika's turn to introduce one of their cards. Mia places the *music room incident* card on the *negotiating identity* category. Mia gives an overview of the incident described in the text and the reasons she feels it relates to the category:

Mia   I mean, I think this could go there in a way too, the Music Room Incident. It was Brendon and another guy who was in the music room trying to play an instrument. I think that guy was seventeen and all of a sudden this gang of kids, young kids, twelve to fourteen, rushed in and kinda tried to cover the drums and the microphone and tried to, just being annoying. And then finally they left and this guy Dan said "Damn immigrant kids" and kind of looked for Brendon for approval, "do you agree? Is this ok?" I thought this was really interesting too 'cause this ethnicity or belonging as a filter of understanding because if they weren't from another origin, they would be just an annoying gang maybe. It would be something else. It's just a group mentality where, kind of young and annoying, wanna destroy, want attention, but now this explanation was ethnicity. And this Dan is also, I mean, Brendon was not a Swede. In a way so its like they can take different roles because they were like us and them so it's in a way about negotiation of, like, in this case I am very Swede, and in another way I'm maybe not and Brendon was all of a sudden a Swede kind of like Dan.

Erika   Or higher up on immigrant scale. There's a hierarchy.

Mia   Yeah, that's also negotiation. Like, "who is the one who has the right to be there? Who has the right to have that?"

Here Mia used the encounter between the children and the ethnographer in the "music room incident" as part of the analysis. Yet, by looking back the comments she first wrote on the card before her conversations with partner Erika, it was Mia who had actually written the point about the immigrant scale. Yet when formulating the explanation for the group, Erika stated the point almost as a cue to Mia, spurring her on in her presentation of the point.

Preceding this move, when Mia first read the account in silence, she had written on the a-frame card two points she found most interesting:

- Interesting to question what the ethnicity question brings to the understanding of the situation. Would have been a different reaction to the same behavior if they were "Swedes." Did they want to be seen or just destroy?
- Example of hierarchy between different groups

Figure 5. Workshop participants discuss, read and move pieces of tangible text.

Whereas only Mia had read the account initially, it was through this highly staged sequence of activist that Erika was able to support her assessment suggesting that there is a "hierarchy of immigrants," a point that Mia had initially written in her comments of the account and later discussed with Erika. This suggests it is a point that Mia conveyed to Erika during their discussion/rehearsal, but Erika then raised supportively in performance to support Mia in front of the larger group. In this case, Mia described the interaction between the boy and the researcher highlighting his role in the incident merely as content to be explored. The researcher's participation in the incident in relation to the Swedish boy and other "non-Swedish" children demonstrates to Mia the notion of a hierarchy of "different groups" and their elasticity.

The event provided a sequencing of actions for three strangers from different fields and three design researchers to quickly engage with material through experimenting playfully with ways of looking upon the material and describing with its contents. The description of the music room incident using the ethnographer's biography demonstrates two levels of triggering performances others to perform. The incompleteness of the accounts or the seemingly raw state of the accounts, namely, void of explicit analysis, combined with the format of the paper and activities, shifts the focus from merely seeking the most accurate facts to share, to allowing the participants to loosely, yet seriously, speculate on ways of looking at the accounts.

The Suspension Of Disbelief

To induce liminality requires that participants are willing to explore the "what if" often requiring a symbolic "sanctioning off" of ordinary accountability of everyday activities. As one of the reviewers of this paper has noted, and thereby giving voice to numerous other skeptics over the years, from corporate clients to ethnographic colleagues: "I find it difficult to imagine just how this approach would work such that audiences wouldn't find it somewhere between amusing and a waste of their time" (anonymous reviewer). Or critics will state that we could not make *their* customers dress up and start acting out, because they belong to a different class of executives. While to an outside observer the playfulness and peculiarity of liminal activities may not appear serious, we follow Schechner and Turner in maintaining that experimental rehearsals have serious and necessary implications for subsequent performances. A "play frame," a "workshop frame," or a "theatre frame," often entail the non-threatening justification people may need to feel compelled to explore otherwise risky ideas and behavior.

Part and parcel to creating liminal spaces for design performances, is the need to indoctrinate skeptics through a range of rhetoric devices and continuously illuminating the value of their participation in such events. To this range count for example the realist impression that these ethnographic representations account for "real people", as well as sheer group pressure to perform well in front of other participants. The transformation through the ritual often includes a surprise in the power of what initially seemed amusing or useless activities. It is therefore a provocative activity to engage skeptical participants and staging such awakenings.

Despite these obvious challenges for this kind of work, we would like to push the argument further and show how we have succeeded in establishing liminal spaces that are radically out-of-the-ordinary, and thereby enabling participants to reshuffle realities in ways that were otherwise not possible.

CONCLUSION

On the grounds laid out here, it makes little sense to uphold a clear working division of labor in producing appropriate technological interactions where the role of ethnographers is to map real and existing practices, and the role of designers is to conceive an attractive and artificial future practice. Further, the perception of design as bridging an imagined gap between "real existing practice" (the business of ethnographers) and "an imagined future" (the business of designers) is likewise rendered less fruitful. A conservative ethnographer may object that ethnography is about understanding that which is already there, and not about changing it or inventing new practices. This objection, however, predicated on a realist ontology, is assuming a priori a categorical distinction between the present and the future. Ontological performativity implies that everything is new, insofar that it is the latest unfolding of practice. The gap between the existing and the future is precisely what is being constructed through the process of design, not the other way around.

It is a frustrating fact that we as ethnographers often cannot recognize our foundational assumptions about ethnography in the way our services are conceived by clients who want "the real people" refrain. To make the most of the present challenges and opportunities for anthropology as it meets design and other interventionist fields in industry, we have consciously adopted an eclectic and experimental approach that liberally borrows and bends concepts across disciplinary boundaries. But it has enabled us to formulate guiding questions for our research in the borderland between anthropology and design: What if airy ideas about better practices and wishful thinking about more interesting technological experiences were given some sort of tangible form? How would they play out among the subjects of the study, if they were invited to partake in the experiment? What bodily resources could be drawn upon, if contingencies were explicitly staged and embodied as conditioning only possible realities among others? How could the creative potential residing within the subjects' skill and practice be realized for purposes that reach beyond the individual? We have found performance theory powerful in understanding and engaging the transformative potential of specific performances such as enacted future scenarios. With the partly improvised future scenario as it was enacted by the senior software developer, we have shown how evoking the embodied habitus of skilled participants in the performance of a future scenario goes beyond the practice of describing and knowing the participant (whether that be a software developer as in this case or a service technicians as in the events that preceded the one recounted here). The participant's embodied habitus was brought to bear in performances of the doing of the body, imitating an idea of the future through the real, and thus leading to glimpses of prior incidents, concerns and situations interspersed with alternative possibilities prompted by the particular present situation. The staging of partly improvised future scenarios creates a state of limbo with regard to the ontological status of the performance. It is not in any strict sense an occasion for observing how maintenance work is regularly carried out; neither for a controlled test of a new product candidate. Yet it is both a continuation of the ethnographic field study in that it yields new insights about the conditions of use practice and it is a continuation of the generative design work in that it evokes new ideas for the concept design. The act of performance fosters identification between the dissimilar ontologies of the here and now and the there and then without reducing them to sameness. The unsettled status of the activity works to create a space of grounded possibility, where the skilled practitioner is included in the effort to bring about design ideas that are rooted in his/her practice.

Although we are accustomed to representations that locate "the real" in terms of mimesis, the ethnographic material brought from a site of use into a design workshop in the form of fragments do not only play out modes of use, they play with modes, leaving actions hanging and unfinished; they do not reflect use practice as much as they present ideas about use practice. When use practices are made present to various designers in text or video fragments, these fragments in turn become the screen to which they project their interests, fantasies and desires. Hereby the ethnographic fragments become the occasion for articulating a more complex and unsettled image of use and design practice, than a singular and coherent account focusing entirely on a confined context of use would capture. The

value thus resides in the participants' willingness and ability to rehearse and perform their own interests into the respective fragments of an ethnographic reality.

Let us present, here towards the end, a perhaps slightly provocative idea. In order to move beyond the "real people refrain", we may need to rather suspend the categorical openness of the ethnographic inquiry and the perpetuation of the ideal notion of longer-is-better ethnography. We propose that it is precisely the investment of one self and one's own desires and agendas that lifts an ethnographic field inquiry out of its everydayness and into something of value to further-reaching processes of change and development of attractive alternatives. From fieldwork, the emergence of patterns, possibilities and the widespread acknowledgement that things could be different are dependent on motivated search. If we acknowledge that we want something from our ethnographic accounts, something that usually exceeds mere documentation, we need to qualify the open-endedness of our inquiries. It is only so open.

REFERENCES CITED

Alexander, B. K.
2005   Performance Ethnography: The reenacting and Inciting of Culture. *The Sage Handbook of Qualitative Research.* N. K. Denzin and Y. S. Lincoln. London, Sage Publications.

Anderson, R.
1994   "Representations and Requirements: The Value of Ethnography in System Design." *Human-Computer Interaction* 9: 151-182.

Austin, J. L.
1962   *How to Do Things with Words.* Oxford, Clarendon Press.

Barad, K.
2003   "Posthumanist Performativity: Toward an Understanding of How Matter comes to Matter." *Signs: Journal of Women in Culture and Society* 28(3): 801-831.

Binder, T.
1995   "Designing for work place learning." *AI & Society* 9(2-3): 218-243.

Blackwell, L.
1998   "Image Acts." *American Anthropologist* 100(1): 22-32.

Butler, J.
1997   *Excitable Speech: A Politics of the Performative.* London, Routledge.

Buur, J. and A. Søndergaard

2000   *Video Card Game: An augmented environment for User Centred Design discussions.* DARE
            2000 on Designing augmented reality environments.

Clark, B.
2007   *Design as Sociopolitical Navigation: a performative Framework for Action-Oriented Design.*
            Mads Clausen Institute. Sønderborg, University of Southern Denmark. PhD
            dissertation.

Gennep, A. v.
1960   *The Rites of Passage.* Chicago, University of Chicago Press.

Goffman, E.
1958   *The presentation of self in everyday life.* Edinburgh, University of Edinburgh Social
            Sciences Research Centre.

Law, J.
1999   After ANT: complexity, naming and topology. *Actor network theory and after.* J. Law
            and J. Hassard, eds. Oxford, Blackwell Publishers: 256 s.

Nafus, D. and K. Anderson
2006   The Real Problem: Rhetorics of Knowing in Corporate Ethnographic Research.
            Ethnographic Praxis in Industry Conference, American Anthropological Association.

Pickering, A.
1995   *The Mangle of Practice: Time, Agency, and Science.* Chicago, University of Chicago Press.

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

Schechner, R.
1988   *Performance Theory.* New York, Routledge.

Turner, V.
1996   Betwixt and Between: The Liminal Period in *Rites de Passage. Sosialantropologiske
            Grunntekster.* T. H. Eriksen. Oslo, Norway, Ad Notam Gyldendal: 509-523.

Verfremdung and Business Development: The Ethnographic Essay as Eye-opener

ANNE LINE DALSGAARD
Institute of Anthropology, Archaeology and Linguistics, Aarhus University, Denmark

This paper discusses the use of essays as tools for communication and reflection in a collaborative research and development process between a philosopher, an anthropologist, and two private companies. Findings from the project "The Meaning of Work Life" will be presented along with a discussion about their relevance for the involved companies. To specify the general anthropological strategy of defamiliarization, the notion of verfremdung[1] is used to detail out specific features of the analytical and representational perspective employed. The paper concludes that the meaning of research results cannot be controlled, as they will always be interpreted according to personal or professional agendas, which is why a style of representation that lays bare their status as interpretations is not only appropriate but may even – by way of estrangement - be revealing and innovative. This conclusion is not new to anthropology as such, but within the context of business ethnography (in which more and more anthropologists are engaged) it has a renewed relevance.

> The ancient Persians thought of the moon as a mirror hung above the earth and reflecting it. That is nonsense. But the distant, the out-of-the-way, the displaced into heights, as it reflects back and leads to an understanding of present reality, may be more realistic than the various kinds of naturalism – that is a special gift to us from reflection. (Bloch et al 1970: 121)

THE PROJECT

In the autumn 2007 I participated in a collaborative research project "The Meaning of Work Life", which involved philosopher Anne Marie Pahuus, myself as an anthropologist, and two private companies: the largest privately owned software company in Denmark with around 400 employees located in the city of Århus[2], and a large national accountancy firm with 900 employees distributed over 29 local offices. The initial contact to Aarhus University[3] was established by the, at that time, CEO of the accountancy firm, and was motivated by a wish or maybe even a need for "something different". As she saw it, the company (and the accounting industry as such) was stuck with a particular way of thinking in their HR management and they needed a new perspective on the predicament of attraction and retention of employees. While the project was still just an idea, the software company heard about it and joined in. With no restrictions at all on our work both companies invited

---

[1] The German word *verfremdung* means alienation or estrangement, that is, a state of mind in which a spectator sees in a fresh light the things he has hitherto taken for granted. The term is often related to Brecht's theatre in which special effects were used to break with the traditional identification with what was going on on stage and hence reach a critical attitude to what was seen.

[2] Århus is the second largest city in Denmark (300.000 inhabitants).

[3] The CEO contacted Aarhus University's outreach department and from here the match between Anne Marie Pahuus and me was established (for further information see www.outreach.au.dk).

us in, hoping that "something different" would be a result of this - in their world - unusual gesture.

Our aim as researchers was to understand how working is meaningful to the employees and in which way the company plays a part (active or passive) in the constitution of this meaningfulness. Meaning was analytically separated into three levels of reflectivity; namely the practical engagement with and enjoyment of work tasks, the meaning of a work related identity, and finally a more abstract notion of meaning that may qualify work on an existential level.[4] We carried out fieldwork in the software company for 2 weeks and in two accountant offices for one month in total, interviewing employees (ten individuals plus a focus group in each place) and doing observation while participating in meetings, lunch breaks and the general atmosphere and talks at the offices.

Beside the rather narrow time framework, within anthropology the project was not unusual in its research design. Several anthropologists and sociologists have already studied the meaning of work life through ethnographic fieldwork (among others Kondo 1990, Kunda 1992, Van Maanen 1975). However, within philosophy ethnographic fieldwork is a methodology rarely chosen. Anne Marie Pahuus thus joined me in a fieldwork on my terms, adding her philosophical perspective to interviews and discussions. In line with well-established, at times mystified, but always venerated ethnographic standards (Bate 1997:1152), we arrived in the field without a fixed theoretical framework to forecast our results. We trusted that by engaging ourselves in the daily activities, the interviews and more informal conversations, we would find something of relevance, inspired by our concomitant analytical exchanges on the notion of meaning itself. The approach was not to dismiss theory, but rather to let theory and experience interact and mature in situ, as we both brought the theoretical discussions of our disciplines to these exchanges.

The interviews with employees were carried out in an open and informal atmosphere, and contrary to our expectations about time pressure and norms of effectiveness in business, informants were relaxed and accepted to delve into recollections of past experiences and reflections upon reasons for doing this or that in life. We had the clear impression that most informants appreciated the opportunity to share experiences and their possible meaning with a couple of outsiders, and a question like "Why did you become an accountant?" seemed to allow for thoughts that were rarely touched upon in the daily hubbub. Probably one reason for enjoying the interviews was also the opportunity to put "things right", and present oneself in the light in which one would like to be seen. A good deal of our data is thus what John Van Maanen calls "presentational data" which, as he writes, concern "those appearances that informants strive to maintain (or enhance) in the eyes of the fieldworker, outsiders and strangers in general, work colleagues, close and intimate associates, and to varying degrees, themselves", that is, "often ideological, normative and abstract images of idealized doing" (Van Maanen 1979:296).

---

[4] Research results will be communicated and further analysed in forthcoming publications.

However, through what was thus communicated in interviews and conversations, we also inferred a different kind of data about the values and expectancies that informants took for granted, regarded as unproblematic and therefore only referred to in casual remarks, if any. These data had to do with the specific organizational structure and daily routines, but also with more general ideas about "the good life", the proper job and the decent person. For instance, in one interview a young accountant answered, when asked why he became an accountant: "I don't know how to say… I was not very good at writing, not very creative, but I have always been interested in numbers". And soon we began to notice the same kind of justification from other accountants: they seemed to think that you should choose for a profession something at which you were good, and also that accountancy had nothing to do with writing and creativity. The duty to do one's job well and the modest attitude to one's own competencies showed to be a general, taken for granted moral stance among the accountants we met. As Van Maanen (1979:295) writes, this kind of data is the most interesting goal of the ethnographic enterprise, but maybe also the most difficult to achieve. The difficulty lies as much in finding the right questions to ask, as in answering them (Bate 1997:1152), and our short stay in the field made the enterprise rather hazardous. But as the following will show we reached at least some understanding of this level of organizational life. The tricky bit, as we saw it, was how to represent our interpretations of what was going on in a way that would move these background expectations into the foreground and provoke reflection.

What made the project unusual, at least in a Danish context, was the aftermath: We produced a report for the two companies, in which we described the characteristics of each company and compared their different structures, possibilities and difficulties. Deliberately we did not write a typical consultancy report with bullets and one-dimensional conclusions, as we wanted the ambiguities, interpretations and contradictions of the field to stand forth. Being true to our background in the humanities we wrote five essays, each with a specific analytical perspective. On the basis of these essays, collected into what for us became "the report", we first met for a two-day seminar with the HR staff from both companies, and later with the top directors of the software company[5] and the company members we had interviewed both places. The report was made available for all members in the companies and some results were presented at a seminar for the partners[6] of the accountancy firm. The direct response from our research subjects was new to both of us, and we were quite overwhelmed by the immediate influence of our research on business development, especially in the accountancy firm[7]. In the following I will focus on the response from the accountants, as this has been the most explicit and revealing.

---

[5] The software company is lead by the owner and founder of the company in collaboration with his co-director and 7 sub-ordinate directors.

[6] Each accountant office was lead by a number of partners, each having their own portfolio of customers. In a certain way these partners were thus the owners of the company, joined by a shared central administration.

[7] I am writing this well aware that anthropologists working "at home" or in development research often experience this interest. But while the public debate, international donors, NGOs or other stakeholders may have an interest in a research project, it is my impression that researchers at home or in development often meet an institutional or

TEXTUAL REPRESENTATON AND DEFAMILIARIZATION

At least since George Marcus and Michael Fischer's "Anthropology as Cultural Critique" (1986) we have made use of the term defamiliarization when reflecting upon the potential of the ethnographic project. In their book Marcus and Fischer (1986:137) discussed how ethnographies of the foreign abroad could be used at home as the basis for a distinctive kind of cultural criticism, and they pointed out epistemological critique and cross-cultural juxtapositioning as two basic techniques related to this endeavor. In our project, carried out more than 20 years after this book came out, the objective was business development and not cultural criticism. And yet, defamiliarization was what we aimed at and, as I will show, epistemological critique and cross-cultural juxtapositioning were essentially the techniques we used. We did not compare the foreign, exotic with the familiar, well-known across national borders but across disciplinary, organizational and economic differences. We were two researchers of different, yet related disciplines; the companies were different in organizational structure and occupational characteristics; and the "economies" of companies and researchers were different, one focused on the financial bottom line, the other on the CV.

When, however, in the following I use the term *verfremdung* instead of defamiliarization, I do it to emphasize the playing with representational devices that I learned to appreciate in the process we went through. The word *verfremdung*, often translated into estrangement, was used by Bertolt Brecht to designate the "displacement or removal of a character or action out of its usual context, so that the character or action can no longer be perceived as wholly self-evident" (Bloch et al 1970:121). This idea of artificially (or perhaps rather artistically) highlighting something by removing it from the ordinary and putting it in a strange context, perhaps historically displaced or maybe presented as a tableau, a still picture, is taking the idea of defamiliarization a bit further than researchers usually tend to accept. As an anthropologist I at least felt an urge to present some kind of evidence for every statement we made. But as our report was not to be evaluated by academics, but by people who were directly engaged in the world described, the validity of the argument was not a question. It was relevance, not argumentation that persuaded our readers; they knew their world, but were interested in a different look upon it. Only gradually, the consequences of this dawned upon me.

The report was made up of five essays in accordance with Aldous Huxley´s dictum that "by tradition, almost by definition, the essay is a short piece, and it is therefore impossible to give all things full play within the limits of a single essay. But a collection of essays can cover almost as much ground, and cover it almost as thoroughly, as can a long novel" (Huxley 1960:v). According to Huxley, a master in essays himself, the extreme variability of essays may best be understood within a three-poled frame of reference: There is a tendency towards the personal and the autobiographical; a tendency towards the objective, the factual,

---

politic inertia, which is far from the response we met. In comparison, companies are minor and more flexible units, as long as economic advantage is secured.

the concrete and particular; and a tendency towards the abstract and universal. And as Huxley (1960:v-vii) writes, even though most essayists feel "at home and at their best in the neighborhood of only one of the essay's three poles […] the most richly satisfying essays are those which make the best not of one, not of two, but of all the three worlds in which it is possible for the essay to exist".

We were two writers with very different professional "tendencies": I wrote in an ethnographic concrete, specific, and at times personal style, while Pahuus leaned towards the philosophic-universal, more generalizing style. Hence, our essays to some degree fulfilled Huxley's criteria for a "satisfying essay" by combining anecdotes, methodological observations, information on company structure and the like, as well as philosophical generalizations. The latter often challenged the anthropological tendency to present analysis as "only tentatively asserted, full of reservation and qualifying detail" (Van Maanen 1979:303), in recognition of the partiality of all ethnographic knowledge, while this ethnographic hesitation at times was too pedestrian for the philosopher. Due to time pressure we did not get the absolutely best possible out of this difference, but even so I think we did better together than each one on her own.

REPRESENTATIONAL DEVICES APPLIED

The fact that we used many pages of densely written text was in itself a break with expectations in the field. Accepting to read it meant accepting a different mode of thought and, at the same time, a change in temporal orientation by looking back instead of forward to new tasks. The first essay began with a description of the two companies, as they appeared to us[8]:

> At [the accountancy firm] the spatial arrangement is a physical limitation, which everybody complains about. In the Copenhagen office the different departments are separated on floors, only tied together by an elevator and a steep and worn staircase. Here it was therefore possible to say: "At least on our floor it is like that!" At the office in Northern Jutland the place was divided into "left" and "right" in relation to the main entrance and here people could say: "It makes a difference whether you turn left or right, when you enter the door!" The remark in Copenhagen inferred the separation and to a certain degree competition between the individual departments of the office, while the remark in Northern Jutland referred to the very different style of leadership that dominated the two departments of the office. In both cases the history (a fusion of independent partners) seemed to be kept alive through the spatial arrangement, thus limiting the flexibility of the present.
>
> At [the software company] no history of independence and fusion marked the architecture. Here physical structures seemed to be formed

---

[8] The report was written in Danish and is here translated by me.

> by a wish for transparency in all processes. From day one we were
> aware of its very concrete transparency. From the hall in the middle we
> saw the employees and managers sitting at their desks focusing on their
> tasks; from the stairs we looked down on people having a meeting in the
> canteen; and walking along the corridors also of glass we looked into
> offices or met the cleaning staff in function. In the beginning we
> presumed a panoptic surveillance as a result of this, but we soon
> understood by participating in the activities ourselves that transparency
> may also create a sense of ease and community.

Describing the companies in these terms we introduced our interpretation of the spatial structures and hinted at a more fundamental difference, which we wished to focus on later in the report, namely a difference in social structure. This difference appeared in the social hierarchy and the relations between the employees. In both companies we found a certain group awareness, which however was of a very different nature. In order to both grasp for ourselves and present this difference to the readers we made use of metaphors, likening the accountancy firm with a bunch of wolf packs and the software company with a beehive[9]. The wolf packs, as we saw them, were structured by hierarchies based on recognition of individual strength with clear markers of respect and subordination, but also by hunting in common, focused and with everybody knowing his place. Every pack was lead by an alpha male (or female), who was a certified public accountant, owning his part of the company. The beehive on the contrary was constituted by a sole queen, the CEO and founder of the company, giving significance to everything that goes on around her, and with both drones (middle management) and workers (IT-developers) being fairly anonymous. With this metaphor we also employed the connotation of pleasure that is often implied in the image of bees and flowers used in equivocal descriptions of human sexuality and procreation. The IT-developers of the software company enjoyed what they did, and most of their activities were driven by a wish to learn from new exciting tasks.

This comparison by way of metaphors was univocally experienced as a help to see the characteristics of one's own company, we learned. Even though one reader in the accountancy firm admitted that he more or less jumped the specific details about the software company (and I am sure others did as well), he acknowledged that he would not have seen the characteristics of being a wolf pack as clearly, had he not seen how different the software company was. As he expressed it, "I may have learned something even without knowing it by seeing the contrast to the other company". The HR director of the accountancy firm expressed it more affirmatively:

> The difference is almost tangible. Wolves survive in their own way, they are
> social beings, they have children who grow. The image of the wolf pack works in

---

[9] In "Cheats at Work" Gerald Mars also uses animals as metaphors in the classification of occupations. He distinguishes between donkeys, wolves, hawks and vultures, describing wolf packs as "occupations based on groups with interdependent and stratified roles" (Mars 2001). However, some of the features he ascribes to the vultures also characterised the accountants' occupational situation.

> comparison with the beehive, because they only have the queen at the end of the table, while the rest of them tear around, while wolfs – they have brains, strength. And especially the awareness of the fact that even though we do a lot for our company not to be too heavy and hierarchical in its structure, the hierarchy develops by itself on the basis of respect for professional skills. Before you wrote this report, I was still convinced that what we needed was a more explicit hierarchy, but I no longer think like that. We must develop this company so that the chaos, the hierarchy chaos that you describe, stays alive, since in the end this is our strength in relation to the customers: the autonomy in relation to the customers, where each member has agency and has to decide what is needed here and now.

In the essays we also allowed the readers insight into the research process through descriptions of how results were generated. For instance we described the sense of excitement and concentration which dominated one morning while we were around, where a group of accountants were preparing for a shared job. We described the filled bags in the colors characteristic for the company, ready on the floor; the suits and ties of everyone being ready to leave; and a meeting where the plan for the day was run over for the last time. And we combined it with a citation from an interview that allowed us to put into words the sense of shared responsibility and alertness that we somehow perceived from what we saw. The words come from a young accountant who had been responsible for several audits:

> It is the process of getting everything planned, going through all the individual functions, going through the process. And then when it is finished, the customer is happy, we have given him something, and the plan actually worked, you know, everything played well, and we reached what we had to in time, even though we had to do something extra.

With combinations of data like this we ourselves understood something and by letting the reader know along the same lines, the reader both saw what we put together and was allowed to make his or her own inferences. Our description was thus openly situated. The intention was not to explain how something should be understood, but to let the reader experience with the fieldworker, and then either reject or accept the relevance of our understanding. This was just an underlying intention, not made explicit in the report, but even so, in an interview with the HR director of the accountancy firm, he said:

> The fact that the method itself affects reality is often an argument against the validity of this kind of investigations, but we have to ask ourselves, if we need the ultimate objectivity at all? In light of the present project the answer is "no". What we need are some themes referring to the reality and mentality of the people who work here – and despite of the fact that the analysis is not 100% objective, we all recognize something in the five stories. I think the form helps, since knowing how it was created one also knows that it cannot be objective. Each time we make a staff appraisal survey we have a discussion about the response rate and whether the result is representative, but we haven't had that kind of discussions with this project. From the

beginning, when we released the report I wrote that this is a *stimmungs* picture.

The inclusion of descriptions of the fieldworker in the field thus worked as a kind of *verfremdung* effect, by not letting the reader forget that "someone saw all this". Another *verfremdung* effect was attempted through the introduction of analytical concepts provided by the anthropological and philosophical literature. Among other concepts we introduced Lave and Wenger´s notion of "legitimate peripheral participation" to describe the learning environment in the accountancy firm. Legitimate peripheral participation implies learning trough participation, first in the periphery of an activity, and later closer to the centre as the participant becomes more and more experienced and has incorporated the values ascribed to the activity. Once near the centre the participant is regarded a veteran and respected by other participants, who again learn by miming the person they respect (Lave and Wenger 1991). This analytical concept allowed us to focus on the way trainees experienced their involvement in more and more demanding tasks and team works, and to describe the implicit learning that took place in the organization. We could of course have described all this without using this concept, but it helped us highlight two things; firstly our own path to understanding what we saw and heard and, secondly, by using this rather awkward concept we highlighted something that was usually taken for granted and turned it into something specific, external and strange. Lave and Wenger's concept has been used as almost equivalent to the Danish native word *mesterlære*, and by way of our intervention this is the word the company uses today to discuss their trainee programs and internal structures in general.

Also in the more philosophical reflections upon the nature of meaning we created a sense of estrangement through abstraction. By applying concepts that we rarely use in everyday language, maybe because they seem too "big" or "old fashioned", Pahuus added to the reflection in interviews, but also later in the textual representation. For instance, she would ask an informant who tried to express something about religiosity: "Do you mean, being grateful for being alive?" And in the introduction to the report among other things she wrote:

> As we see it, besides being driven by certain needs, human beings search for the fulfillment of inner expectations, longings, hopes and dreams, which cannot be described as lacks. They should rather be described as quests, in the pursuing of which the individual has to adjust to the natural expectations of others towards life fulfillment and happiness. These quests drive people towards meaningfulness, but when meaning is experienced, the quest is reinforced in the meeting with the longings of others. Happiness is thus often experienced as a search we share with others.

An accountant partner from the Copenhagen office later expressed that he had enjoyed this introduction, where we examined the meaning of the word "meaning", since through that he had reflected upon his own notion of meaning and his own values and aims in life. As he put it: "I could make use of an hour's lecture on that, because if I was clearer about it

myself, I could perhaps also help my employees reflect upon it. They forget the meaning of being an accountant, because we seldom reflect upon it".

Through the mixing of observation, direct citations carrying the sound of the well-known everyday, analytical perspectives suggesting a more abstract level of understanding, and our own deliberations upon what we saw and heard, we thus hoped both to evoke a sense of relevance and the kind of reflection that would allow us all to understand more. In the discussions and interviews that followed the release of the report I for my part learned more about the significance of the work we had done.

RESPONSES TO THE REPORT

The first responses we got from our readers were remarks like "This is not like anything we have had before!" or "I have devoured it, it is very interesting – it is about us!" These were the responses from the HR staff with whom we met for a two-day seminar. They had different backgrounds, most of them trained in business economy, but also a few of them having a human science background, and due to their training and work they understood the humanistic approach we had taken. As the HR director from the accountancy firm expressed it:

> You could say that the essay form provokes and initiates something, because you have to interpret it – you cannot just relate to numbers and percentages, you have to relate to another human being who expresses thoughts and feelings, and hence you can choose to think either "I could have felt like that myself!" or "I could never have felt like that!" That is really interesting to discuss. And this discussion you do not get by looking at some graphs. Like in a literary work you are allowed to understand what that person feels.

During the seminar we discussed our interpretations, and what we had found was challenged, further developed, and refined. Especially the notion of legitimate peripheral learning and the Danish term *mesterlære* was very much discussed and worked as an eye-opener for the accountant company. In a conversation some months after this seminar the HR director of the accountancy firm made this comment:

> The image of the wolf pack has brought us to a common understanding and a common language – some strong symbols that we can work with like the *mesterlære* – something that has grown out of the project. You identified something, and we discussed it at the seminar in December, but now it has become a theme that we discuss in our management development and something we communicate out of the house.

Another finding from the accountancy firm that we discussed at the seminar was our observation of the accountants' sensitivity towards the person they spoke to. We thought we were well-trained in the skill of listening and adjusting to the viewpoint of the person in

front of us, but in our interviews with the accountants we met people who were much better skilled in this faculty. Being a good accountant is normally perceived (by themselves and others) as being good at numbers, but we learned that empathy and sensitivity towards the needs of others are crucial competences too. This is, however, not something accountants know about themselves; it is learned in practice, incorporated through *mesterlære*, and it is not communicated in job advertisements, training material or even meetings with one's superiors. The HR staff found that this undercommunication was part of a general reputation of being boring that accountants suffered from, and together with the HR staff from the software company they discussed how this reputation could be changed. In general, the meeting between the HR staffs from both companies worked very well, as the comparison we had made use of showed to be very productive also in direct conversation.[10]

When the CEO of the accountancy firm later asked for an executive summary of the report, the HR director had refused to write it, as he found it important to read the full report and draw one's own conclusions. He said: "One of my missions in life is exactly to work with the idea that the world is never objective; it is experienced by people who live in it, and therefore this idea of an objective truth is a major illusion".

After meeting the HR staff we met the employees of both companies and here the responses were more varied. Some clearly had not read the report but found it interesting to hear our oral summary; others seemed to have read at least some parts. The metaphor of the wolf pack was discussed, and it allowed employees to exchange views upon the consequences of the social structure in the company. All experienced a hierarchy, but was that necessarily a bad thing? The questions arouse because contrary to our findings the company used to see itself as having a flat hierarchy with very short, if any, distance in daily routines and communication between top and bottom. In the discussion at the accountant office in Jutland it was possible to put into words, what was only vaguely expressed in terms of staff benefits at an office meeting in which we participated during our fieldwork. At this office meeting somebody asked for "impulsive benefits", which we saw as a wish for attention and recognition rather than a craving for the actual benefits. Fruit, pizza, shirts and mobile phones do not make sense unless they are experienced as confirmations of a meaningful relationship, we wrote. By discussing the relevance of this interpretation of ours, it was possible to enter into a subject that seldom, if ever, was directly addressed (the experienced lack of attention from one's direct leaders). Also our description of their emphatic skills seemed meaningful to the accountants we met. However, to the employees involved the process seemed to be more important than the result. As one accountant said: "You were here and that was fun. We talked about a lot of things, so I did not get more from reading the report."

The essays were, however, also read by people who were not trained in our humanistic approach nor had they been directly involved in the research process as "informants". The

---

[10] Initiated by their experiences at the seminar we held together, the HR staffs from the two companies have continued this collaboration, now with more partners involved.

CEO of the accountancy firm was employed after fieldwork ended and was presented with our report almost from Day One in his new position. When I asked him about his first impression of the report he said: "You have chosen an interesting, narrative form appropriate for the theme, but for people who are trained in reading a different kind of texts, it is difficult to read. You have to remember that in the industry we always lack time. The concepts you use are different and definitions difficult to decipher. We are used to divide it into "organization", "motivation" etc. and it is no secret that some statements of yours created anxiety in the board, because they were misunderstood. It takes some afterthought to realize what you write. Then I said "Time out! Now I read it and give you my interpretation of what is said." The CEO was very explicit about how he made these interpretations, and since the report was open for interpretations, he had made use of the points he found relevant for his own projects. As he said: "Especially the point about mesterlære and staff benefits made resonance in the organization, as they fitted into something we already wished to do."

In the accountancy firm so far the direct result is mainly a changed process around traineeship inspired by our use of the term legitimate peripheral learning or *mesterlære*. The partners, or "veterans" in our language, discuss their role as role models, and it is discussed how young people coming from a very different learning environment (the school) can be helped to understand what is demanded and possible in the *mesterlære* setting. But besides that, the whole process seems to have provoked reflections upon what kind of knowledge should direct the further development of the company. The CEO does not find the report of direct use in the future. As he said: "It is a fleeting theme and in 2-3 years time it is no longer relevant, because we have moved to a new situation. There is no progression in it". But nevertheless, maybe something is created by the still picture, or snap shot we have presented? In Brecht's theatre the tableau, or the frozen action, was used to create a "stillness in the midst of action" , twice as telling as the action itself (Bloch et al 1970:124), and maybe our *stimmungs* picture will work like that? When we first presented the essays to the HR staff, we were asked to change a few paragraphs as what was presented was "too hard" on paper, despite of the fact that at least one of the situations described was commonly known and discussed in the company. "Freezing" something on paper thus changes its nature. It may lead to "aha!" experiences as well as painful realizations of what is usually just lived experience.

THE PROJECT RECONSIDERED

Our discussions especially with the people from the accountancy firm did not allow us to forget, though, that the results of a research project cannot be controlled, as they will always be interpreted by the receiver. If we as researchers did what Clifford Geertz proposes, namely interpreted what people made of their interpretations of what they and their colleagues were doing (Geertz 1975:9), the employees certainly interpreted our interpretations, too. In a book chapter written by the HR director of the accountancy firm and his colleague, it is put like this: "The five essays express the researchers' experiences with

life in the companies. They were prepared to wonder, observe and interpret what they experienced. It became stories that have to be experienced and interpreted of the people, who work with them – and the result is not known before everything is read and digested by one's personal interpretation apparatus"   (Daus-Petersen and Jonassen n.d.).

As is evident in the interview excerpts above, both the CEO and the HR director had their own agenda in the handling of the report, but they also both had to realize that once begun, the process could not be stopped. As the HR director and his colleague further write: "It has taken courage to enter the project. The courage consists of entering a process where you do not know the result. What you commit yourself to, you have to fulfill, which means communicating and working with the results no matter what they may be. We knew we were visited by two researchers, who knew very little about business life and who maybe even had a lot of preconceptions about the accountant profession and software development. We, on our part, also had our preconceptions about researchers and considerations about what they would find with their unknown methods of analysis" (Daus-Petersen and Jonasson n.d.).

Looking back upon the project and the report I can see how many of these preconceptions soon became irrelevant, while others played an unrecognized part in the process. We as researchers at least had preconceptions about how research can be used outside academia. We somehow thought we could present a neutral, outsiders look and thereby provoke reflection – and to some degree we could. By naming that which we saw, we helped some people to see their situation and what could be done more clearly. A company partner from the accountancy firm expressed his learning from the report like this: "It is as if our people do not know what they actually know. When they reflect upon what it means to be an accountant, they suddenly see it in a new light and say 'Wauw, is that really us!' I think it is because they learn, as you say, through incorporating their skills and hence they don't think about it".

The irony is, though, that we could probably have been much more daring, employing both the *verfremdung* effect and story telling much more than we did. This was revealed to me when we were surpassed in our representational experimentation by one of the accountants: The company wanted to develop a new product, namely family economy advisory, and to introduce the idea to the rest of the company partners, one of the accountants wrote a short story describing the product through the experience of a customer. When I spoke with him recently about our report, I asked him if we could also have been much more "literary" in our descriptions of the company, and after some hesitation he said: "Well maybe…I was not provoked by what you wrote. I recognized my employees in what you presented and I had this experience of "Aha! This is something I know but haven't thought about", but I would have liked it sharper. As it is now, it is written as a matter-of-fact portray, but it could be more present, more provoking."

Thinking about what he said, I realized that despite of the fact that we felt we experimented with our essays, we still stayed close to a scientific ideal of impartiality. We somehow gave priority to our image as human science researchers, without realizing that

nobody doubted this and that by being more provoking, we could have added substantially to our own and the companies' reflection process. But maybe we just did not dare. In a funny way one of the accountants echoed this when I asked him about the report, and he answered that he had not had time really to read it. I then said: "Have you read any interesting texts recently?" And he answered: "I read this on a packet of lozenges the other day: Knowing what to do and not doing it is lack of courage!"

Both we and the companies learned a lot from the process, and what we did not dare may be excused by our innocence. But it has made me realize that for anthropologists in the field of business it is timely once again to reconsider our means of representation and preconceptions about our readers. The question to ponder is how ethnography can play the role as the moon, the reflector, and when that is the appropriate role to play.[11] We have entered a field largely structured by an economic logic, which among other things implies that time is money and truths are not negotiable. By challenging this logic through an insistence on pausing, reflection and the partiality of truths, we may learn more, contribute to business development, and explore news ways of working relevant to anthropologists engaged in research as well as consultancy work.

NOTES

REFERENCES

Bate, S. Paul
1997   Whatever Happened to Organizational Anthropology? *Human Relations* 50(9):1147-
          1175

Bloch, Ernst, Anne Halley, and Darko Suvin
1970   'Entfremdung, Verfremdung': Alienation, Estrangement. *The Drama Review: TDR.*
          15(1):120-125

---

[11] It would be interesting here to compare organizational anthropology with medical anthropology as this branch of anthropology has for years been confronted with like questions. Within medical anthropology a critical and an applied approach were developed in the 1980s. Only later, the two have come together in a more fruitful combination of academic and practical concerns. We could perhaps learn from that experience in the present development of organizational anthropology.

Daus-Petersen, Morten and Lise Svindt Jonasson
N.d.   Hvad er meningen? *In Humaniora - erhvervslivets nye grundstof.* Lars Frølund and
         Christian Hansen, eds. Copenhagen: Gyldendal, Academica

Huxley, Aldous
1960   *Collected Essays.* London: Chatto and Windus

Geertz, Clifford
1975   *The Interpretation of Cultures.* London: Hutchinson

Kondo, Dorinne K.
1990   *Crafting Selves: Power, Gender, and Discourses of Identity in a Japanese Workplace.* Chicago:
         University of Chicago Press

Kunda, Gideon
1992   *Engineering Culture. Control and Commitment in a High-tech Cooperation.* Philadelphia:
         Temple University Press

Lave, Jean and Etienne Wenger
1991   *Situated Learning: Legitimate Peripheral Participation.* Cambridge: Cambridge University
         Press

Marcus, George E. and Michael M.J. Fischer
1986   *Anthropology as Cultural Critique.* Chicago/London: University of Chicago Press

Van Maanen, John
1975   Police Socialization: A Longitudinal Examination of Job Attitudes in an Urban
         Police Department. *Administrative Science Quarterly* 20(2): 207-228

1979   The Fact of Fiction in Organizational Ethnography. *Administrative Science Quarterly*
         24(4):539-550

All That Is Seen and Unseen: The Physical Environment as Informant

LISA REICHENBACH
in-sync Consumer Insight

MAGDA WESOLKOWSKA
Anthropology in Design

INTRODUCTION

There is an old riddle, "What is everywhere, but invisible?", to which the answer is "air". But in ethnography applied within settings such as marketing and product innovation, the answer might as well be "the physical environment." While social scientists are trained to consider informants and environment as interrelated and crucial information sources in ethnography, it nonetheless appears that all too often the environment may be underutilized in ethnography in many industry settings. This is a troublesome omission as the physical environment can be tremendously valuable to any ethnographer on the hook to find strategically relevant insights about a given target.

This paper argues for a practice of industry-oriented ethnography in which the physical environment is viewed as an informant that helps us to find insights related to our end goal of understanding human behavior, such as what is highly motivating or what creates profound tensions for informants. We advance this argument in four sections. First, we make a case for what we believe to be the essential problem: that, notwithstanding extensive social science work on the significance of the relationship between people, places and material culture, the physical environment does not receive enough consideration in ethnography within a marketing context, with the result that we could potentially fail to bring our clients the full value of the method. Second, we discuss how an amalgam of two theoretical approaches, phenomenology and material culture studies, provides inspiration for how to think about extracting insight and value from an informant's physical world, which we define as the spaces, places and objects, and our relationships with them, that make up our physical and indeed social world. Third, we illustrate how this theory can translate into

practical methodological approaches, sharing a number of examples from our own work in which a focus on environment helped us to gain texture and deeper understanding, leading to richer insights and better strategic recommendations. Finally, we conclude with a call for a theoretically informed approach to maximizing engagement with physical space in ethnography applied in marketing contexts and note that, while we are writing from within the context of marketing and brand strategy and product innovation, we posit that the principles herein could enhance ethnography in other applied settings as well.

DEFINING THE PROBLEM

In recent decades the concepts of space and place have been explored in a number of academic disciplines, such as anthropology, design and cultural geography (see e.g. Tuan 1977, Tilley 1994, Feld & Basso 1996, Miller 1998, 2001, Seamon 2000, Low 2003). [1]However, three observations indicate to us that the richness and applicability of this thinking have not yet been fully realized in industry-oriented ethnography, even though everyone seems to be "doing it", that is, collecting observational data that can include aspects of informant's physical environment.

First, we have noticed that many of our clients, either through their own orientation or as a result of being "trained" by other practitioners, tend to think of informants' physical environments in ways that, while helpful, are nonetheless often limited. For example, some may perceive the physical environment as a mere backdrop to the real purpose of the ethnographic endeavor, namely observation and interview. In this sense, the environment *may* be useful insofar as it provides fodder for those contradictions beloved by clients, where informants say one thing and their environment says something else (i.e. the mother who says she makes all her children's meals from scratch, but then is found to have a cupboard stuffed full of Kraft Dinners), but the environment is not necessarily a specific focus of inquiry in its own right. Other clients may have a greater orientation to the physical environment, but this may still be limited to the explicit marketing or product development concern at hand, such as how big the TV is and where it is placed, whether patients have access to healthcare marketing materials in a physician's office, or how people have adapted objects to suit their needs. Still other clients are more open to the environment as a source of data, but they expect or conclude rather face value interpretations of it, such as "family photographs on the wall indicated strong family values". Finally, some clients may express great interest in the environment, but here their concern is in being able to replicate details thereof to create verisimilitude in advertising and communications so that the target can feel the client "gets" their reality. Each of these scenarios, while legitimate and demonstrable benefits of ethnography, fails to explore deeper cultural meanings narrated by the physical

---

[1] When we say design, we are including fields such as architecture, landscape architecture, interior and industrial design where questions of space and how humans construct meaning through it are both a natural fit and easily applied (although ethnography may not be a common research approach).

environment, and thus misses the opportunity to use the environment sufficiently as a gateway to insight into an informant's lived experience.

The second observation that leads us to conclude that the environment is underutilized in industry-oriented ethnography is that there is a comparative dearth of writing, theorizing and methodologizing about the physical environment within the fledgling discipline itself, particularly in comparison to the attention given to methods and analytic tools for interviewing and observation. For example, the recent book *Ethnography for Marketers* (Mariampolski 2006) virtually ignores the topic, focusing instead on observing and interpreting behavior and events. Arnould & Wallendorf's (1994) otherwise rich and oft-cited article "Market-Oriented Ethnography" tantalizes with a few descriptions of physical settings, and indeed hints at how material culture can shed insight into class, but focuses primarily on interpreting observation and verbal reports. And finally, Sunderland and Denny's recent (2007) *Doing Anthropology in Consumer Research* contributes much to the field, but not an explicit theorization or methodologization of physical environments. Thus we see that although these works make generous contributions to the development of the field of marketing oriented ethnography, the physical environment as either a source of data or fodder for cultural analysis is only peripherally addressed.

We have seen a similar lack of theoretical and methodological attention in the proceedings of the last three Ethnographic Praxis in Industry Conferences (EPIC), in which, of the many articles and workshops to date, one can count only a handful of pieces that deal with the physical environment explicitly. Even these tend to offer glimpses of potential rather than explicit frameworks for how to think about the environment and material culture. To take several examples, at EPIC 2005, Radka and Shieh organized a workshop entitled "Defining the impact of physical spaces on social interactions" that sought to work with participants to develop "clear, rigorous, and reusable tools for analyzing physical spaces"; this shows an interest and commitment to the topic, but as it was a workshop, there was no published outcome with which the larger community could engage. Jones & Ortlieb (2006) refer very briefly to several anthropological theories on place-making, but their goal is to create a conceptual anchoring for their study on designing online places, not to maximize the value of physical environments in real-world settings. More helpful to this project is Zafiroglu & Asokan's (2006) "At Home in the Field: From Objects to Lifecycles", in which the authors adopt a research framework "informed by anthropological models of exchange, consumption and material culture" (Zafiroglu & Asokan's 2006: 139). Their focus on material culture, specifically how televisions are used to mark and celebrate social relations, is an inspiration; however, at least in this excerpt of their research, their inquiry did not extend past the material culture of the television to include a wider look at the environment and other material objects, their impact on social relations and what the totality said about their informants' values and motivations. Deasy & Lucken (2007) explicitly examine built environments, but only from the point of view of *designing* for optimal communication, and they neither reference nor seek to advance anthropological conceptions of place or material culture.

Having outlined the overall situation, it is certainly worth noting two notable exceptions to this general rule. Grant McCracken (1988, 2005) and John Sherry (1998), both anthropologists and analysts of, and consultants to, the marketing world, have consistently brought physical environment to the fore of their inquiries. For example, in his essay on "homeyness" (2005), McCracken addresses the relationship between place, the objects within it and the construction of identities. Sherry's *Servicescapes* (1998) explores how experiences are created through the use of signs and symbols in the retail environments, and how these spaces become imbued with meaning through the retailers' theatrical approach to the environment and the embeddedness of enduring cultural values within them. However, while the work of both of these authors is also an inspiration, arguably it represents a springboard for further discussion of how to think about and extract insight from the physical environment, rather a suite of definitive approaches to the same.

Finally, in casual conversation with colleagues in venues such as EPIC, it appears that while many of us have the training and orientation to engage more deeply with informants' physical environments, we don't always have adequate structural support to do so in the environments in which we work. For example, colleagues or clients may question research guides that permit time for exploration of objects or the environment that do not appear to have immediate relevance for the project, or they may express discomfort with incorporating apparently tangential data into analysis. This is, in part, why we wish to make the case for methodolgizing it here. In the next section we will show how certain theoretical orientations can provide us with solid ideas and frameworks for thinking about the physical environment in marketing oriented ethnographies, and latterly, how this can add value.

DEFINING THE OPPORTUNITY: MARRYING PHENOMENOLOGICAL AND MATERIAL CULTURAL APPROACHES FOR RICHER APPLIED-ETHNOGRAPHIES

The efflorescence of social science theorizing about peoples' relationships with places, spaces and objects has created a wealth of material upon which to draw to fuel a marketing-oriented ethnography that regards the physical environment as central to its practice, and indeed, as an informant of a kind. In our project here, we have been strongly influenced by two not unrelated approaches: phenomenology and material culture studies. Although they have different intellectual inheritances, they share in common an orientation to thinking about people in relationship to the spaces they inhabit, and they understand people, places and things to be, at least to some degree, mutually constitutive. Of interest are not just people, places and things, but the relationship between them, and how these are suggestive of social processes, thus providing insight into what's motivating and appealing, and indeed, what's really happening to people in their daily lives. In this section, we will outline some of the key concepts and directives we have drawn from them so that in the following section, we can illustrate how we have methodologized them in a way that they can add clear value within a project context.

Our starting point for this discussion is with ethnography itself: what are its unique strengths? What is at the heart of the ethnographic project, whether academic or market-driven? These questions generate two important answers, which themselves, in our view, create an argument for engaging with the environment through phenomenological and material culture approaches. First, in ethnography, far more than other research methods, the focus is on *lived experience*. We define lived experience as what people do, how, where and why they do it, the structural, social and emotional facilitators or barriers that accompany what they do, and of course, their own perceptions and interpretations of all of the above. Second, in ethnography, *the researcher him or herself is the research instrument*; in other words, we rely less on questionnaire or camera (although these can be helpful supplements), and more on nuanced observation, relationship, human empathy and intuition. To be effective, we must employ all our senses and faculties.

These two central premises of ethnography, lived experience and the centrality of the role of the researcher in *being there*, are in natural sympathy with a phenomenological approach to ethnography. For example, Seamon summarizes a phenomenological approach thus:

> In simplest terms, phenomenology is the interpretative study of human experience. The aim is to examine and clarify human situations, events, meanings and experiences "as they spontaneously occur in the course of daily life" [von Eckartsbeerg, 1998, p. 3]. The goal is "a rigorous description of human life as it is lived and reflected upon in all of its first-person concreteness, urgency and ambiguity" [Pollio et al., 1997, p. 5] (Seamon 2000: 2).

We see that this description could just as easily be about ethnography as ethnographers too try to understand and describe human experience through a synthesis of an informant's interpretations and our own situated and reflective analysis of the same. However, this very similarity begs the question as to what an ethnographer has to gain by adopting a self-consciously phenomenological approach? After all, if the two perspectives are already so aligned, what more can this add?

We would argue that adopting a phenomenological approach, especially one enriched with ideas from material culture studies, creates certain imperatives in practice. The "rigorous description of human life" that phenomenology requires is characterized by certain features, such as, for example, an attention to sensory data, an inquiry into how space is invested with meaning, including how cultural norms and social relationships are inscribed on to place, and a recognition that environments are dynamic, not static. These features, perhaps easily overlooked unless one explicitly challenges oneself to pay attention to them, help to sensitize the ethnographer to particular avenues of pursuit, and also the potential means by which to pursue them.

As a starting place, a phenomenological approach asks us to engage all our senses actively as we assess the environment; in other words, we must, if you will, interrogate our own being-in-the-world when in our informants' environments. Practically, this means *listening*, both to what the informant says, but also to the soundscape the informant may be intentionally creating – or perhaps subjected to by others; *smelling*, for example, do we sense cleaning, mustiness, pets, etc; *seeing*, for example, how is space ordered? What goods are present? Where resources are emphasized?; and finally, *being sensitive to atmosphere,* for example, is there a feeling of comfort and security, or is it oppressive? These sensory dimensions give us greater insight into the lived experience of informants, and they may also speak volumes about peoples' aspirations or constraints. Further, sensory elements powerfully tie into the social, and even professional, relationships we are often trying to understand. In some cases, this may be familiar ground, such as a mother self-consciously trying to create "good cooking smells" to give her family a sense of home. However, in some cases, the interplay between the senses and social relations may be far subtler, but equally as important, such as, for example, a physician's use of touch in his office, which may simultaneously be a way of guiding and comforting patients through a treatment process, and a means of marking his social supremacy in that environment, since he is the only one permitted to initiate touch with others.

Second, because phenomenological and material culture approaches assume that space is not neutral but rather invested with meaning, it also requires us to be attentive to the meanings both we and our informants can interpret, and indeed which they may be consciously trying to create. While "meaning" itself is a broad term, we add specificity by focusing on particular (and sometimes overlapping) kinds of meaning: how informants' environments, and the objects therein, represent their engagement with social norms, how they convey their inhabitants intentions, and how they are suggestive of social or group power relations. Regarding the former, we have been guided by various theorists who have argued that the spaces and things that constitute our physical environment may represent, or be negotiations of, social norms. For example, as Bourdieu has famously argued (1977), physical environments can be homologies of social values and norms (e.g. single-family versus communal dwellings; segregated male and female spaces, etc.). More recent arguments, notably advanced by Miller et al (2001), take Bourdieu's idea much further, arguing that peoples' relationship with spaces and objects are not a one-way affair, but rather are dynamic and reciprocal. Thus, rather than environments and objects facilitating aspirations and behavior solely in line with accepted social norms (e.g. Victorian silverware and rigid class distinction), we see that people use space and material culture to interpret, personalize and even negotiate social norms. For example, of her chapter on the aesthetics of social aspiration in the UK, Clarke writes that she:

> does not simplistically suggest that the external abstract forces such as 'class' and 'the State' are countered through the appropriation of domestic environments. Rather, it considers 'home' as a process, as opposed to an act of individual expressivity, in which past and future trajectories (inseparable from external

abstractions as 'class') are negotiated through fantasy and action, projection and interiorization" (Clarke 2001: 25).

This focus thus compels us to pay close attention to how we see social norms accepted, contested, negotiated, or even manifest in the form of unresolved tensions. Further, we also watch for how we see objects or spaces being used to convey agency or intentionality. Gell (1998) and Miller (2001) have described how places and things may convey their creators, owners or distributors' intentions. We've seen this illustrated, for example, at the family breakfast table, in which both the table and the breakfast cereals that the children consume became agents of mothers seeking to bind children to the home with invisible threads, so that they are centered and feel cared for no matter where their day takes them. And finally, we are also attentive to how power maps on to the places in which we're immersed. Tilley writes:

> The relationship of individuals and groups to locales…also has important perspectival effects. The experience of these places is unlikely to be equally shared and experienced by all, and the understanding and use of them can be controlled and exploited in systems of domination…. Features of the settings of social interaction may constitute 'disciplinary' spaces through which knowledge is controlled in a highly structured manner. The ability to control access to and manipulate settings for action is a fundamental feature of the operation of power and domination (Tilley 1994: 26-27).

Although Tilley's frame of reference here is Neolithic landscapes, as we shall illustrate in a later example, his comments are just as apt for physicians' offices, and even the expression of power within the home.

Third, a phenomenological approach also asks that we are attentive to movement and change: being-in-the-world is dynamic and temporal, not static. In ethnography, this means being attentive to deliberate versus unconscious movement, that is, what is performative, and perhaps meant to draw our attention towards something, and what is more natural, or habituated and routine? It also asks us to look at the flow or movement over time and through a given space – obviously relevant if we're looking at shopping patterns, for example, but also revelatory of how patients are processed through treatment centers, and even within the home, such as, for example, in the form of homecoming routines. And what do our informants' movements and gestures tell us about their emotional connections to places and things, about their comfort with a given topic, about their sense of power and authority to speak, about their evolution in relation to a given topic, and so on? Each of these aspects of movement and change help us discern the social processes, behaviors or needs that our ethnographies are asking us to understand.

Finally, even as we consider all of these qualities of the physical environment, we also try to understand them from the point of view of the informant; that is, we involve them in the interpretation of what we're seeing and experiencing, rather than simply assuming
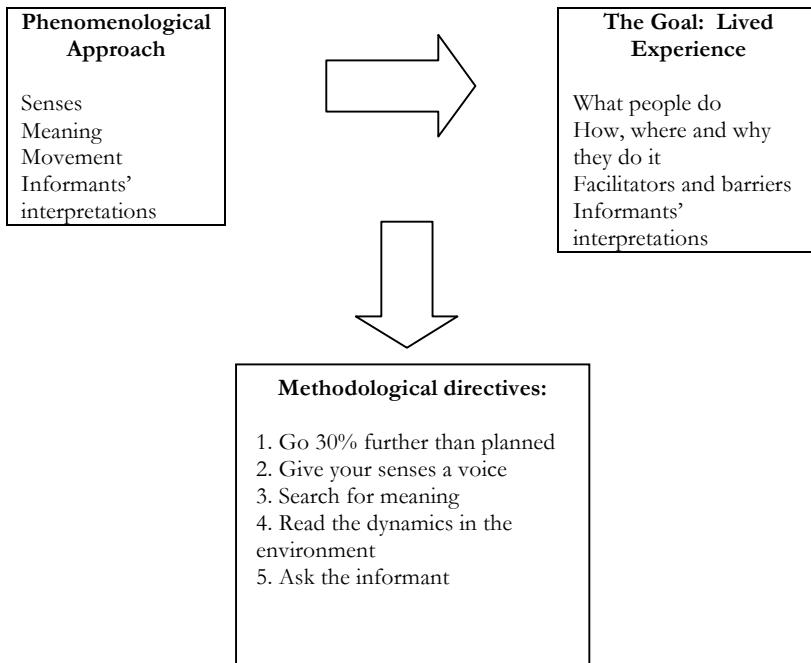
meaning based on our own interpretation of spaces, material culture and so on. While of course consistent with the value that anthropology has traditionally placed on both emic and etic (insider and outsider) perspectives, this focus on the informant's account and interpretation of his or her lived experience also makes theoretical room for their own agency. In other words, it disrupts any tendency to look at spaces and material culture as merely representative of internalized social norms, and instead redirects us to focus on how people, places and things are acting on each other to create meaning, value and behavior. This orientation clearly overlaps with writings by McCracken (1988, 2005) and Miller (2001, 2005), in which consumption can be seen as agency, not acquiescence, and in which we are in dynamic relationships with the material culture in our lives, rather than merely destined to use it to replicate and live out social norms.

FROM THEORY TO METHOD TO VALUE

Having outlined the way in which we see phenomenological and material culture approaches possessing the ability to inform how we think about the physical environment in applied ethnography, in doing so enriching our insights, we'd now like to detail specifically how we've incorporated these ideas into a very simple framework so that we always have a robust engagement with our informants' environments when we're in field. We will also share insights that arose as a result of this approach, which at a minimum augmented our results, and on occasion provided the breakthrough insight that helped us chart the best solutions for our client's business problem. Naturally, some of the principles will feel deeply familiar to ethnographers, and many of us may already be incorporating them in various aspects of our work. However, for us, the value of the framework lies in its implicit reminder to interrogate the environment thoroughly every time, rather than leaving it to chance, or dismissing apparently tangential insights without asking ourselves about the larger picture to which they might be adding up.

At the outset of this section, however, it's worth revisiting what we're actually looking for in our ethnographies: what are the *kinds* of insights we seek as underpinnings to identifying brand opportunities in marketing strategies, communications and innovation? Essentially, we're looking for insights into lived experience, which we defined above as understanding what people do, and how, where and why they do it, the structural, social and emotional facilitators or barriers to doing it, and of course, informants' interpretations of the same. From these, we then extract what drives people, such as aspirations, values and tensions (which we define broadly as discrepancies between how people feel things ought to be and how they really are).

With, then, understanding lived experience as the central goal, we have created this very simple framework as our guide to ensure that we contemplate the role of the physical environment in our inquiry and analysis in a rich and detailed way:

Phenomenological Approach		The Goal: Lived Experience
Senses Meaning Movement Informants' interpretations		What people do How, where and why they do it Facilitators and barriers Informants' interpretations

Methodological directives:

1. Go 30% further than planned
2. Give your senses a voice
3. Search for meaning
4. Read the dynamics in the environment
5. Ask the informant

1.   Go 30% further than planned

In practice, interrogating our informants' environments means we need to *access* them, and that we need to be open to thinking about their import beyond the immediate research question at hand. In our immersions, we demand this of ourselves by applying the "50-50 rule". Simply, this rule allows us to spend up to half of our total interview time at the couch, kitchen table or desk, but requires that the other fifty percent is spent getting the informant literally to walk us through his or her life and context. When this is executed successfully, the whole interview is dynamic, flowing easily from seated conversation and reflection, to movement and investigation, back to seated conversation, albeit perhaps in a new space. Where this isn't possible (such as with health or ability impaired patients; people very sensitive to privacy), we think about how we can honor the spirit of this principle, such as, for example, using different pieces of the environment as prompts to engage in our conversation ("In which part of the house do you feel most at peace? Why? What stuff do you have in the room?").[2] In the context of marketing oriented ethnography, the 50-50 rule is a great imperative for interrogating the environment and going beyond a brand oriented house tour.

---

[2] See Miller's (2005) comment on the tension between privacy and research inquiry.

However, this precept is not always as simple to follow as it sounds: both we and our informants find that it is comfortable to permit a static format, and naturally, both we and our informants have social reserve that inhibits us from demanding or easily offering access into private domestic or professional spaces. If sensitively practiced, however, we find the rewards are worth the effort, and from our experience, we have learnt that much of the stimuli to get moving comes through the interview itself, that is, the informant will say something that creates a logical opening for us to investigate further (e.g. "I keep my exercise equipment in the basement; it works well because I can watch TV while I sit on the stationary bike." "Great, can you show me how it's all set up?"). However, sometimes informants don't give obvious openings like this. For these instances, we have developed a number of techniques that facilitate movement and exploration. For example, we may ask informants to walk us through their environment from the perspective of someone other than themselves (e.g. their mother with Alzheimer's or their teenage daughter), we may ask them to take us to the place (or thing) in their house that best symbolizes their relationship with the topic of the inquiry, or any other topic of interest that emerges (e.g. their relationship with their health, with money, etc.), or we may ask them to take us on a house tour and tell us, from their perspective, what each room "says" about them, and/or their roles, relationships. We might also prompt them with the old phrase, "If the walls could talk, what would they say about X? How might this be different room to room?".

2.   Give your senses a voice

Given that in ethnography we are humans plunged into other humans' environments, it is natural that our senses are alert and ready to help us interpret the surroundings in which we find ourselves. However, all too often, we make little or no provision for interpreting sensory data beyond the most obvious, that is, what we've seen and heard. The other, less privileged senses, such as smell, touch, and, if you will, a reading of atmosphere, are typically relegated to immediate post-interview chat with our colleagues and clients. Our directive, however, demands that we assess what we've felt as well as what we've seen and heard, not only to see if it tallies with what the informant has presented to us, but also to see what else we can glean from it.

For example, in a recent study on patients' experiences with chronic pain, we found that a number of informants actively sought to portray to us their resistance to incapacitation, and indeed, their narratives of survival and endurance were remarkable and important. However, by using all our senses when in-home, we were able to go beyond the appearance of things to see where they actively struggled on a daily basis. So, to take just one example from what became an overall pattern, in an informant's bathroom in one home, we saw equipment she had had installed in order to enable her to get on and off the toilet and in and out of the shower: clearly highly relevant to the topic at hand. However, we also noticed the dankness of the bathroom, in which towels were damp, the floor was clammy and it smelled rather fusty. This sensory perception was as important as the more obvious physical adaptations she had made, for it told a story about the difficulty of performing normally routine tasks like cleaning, about the pride that may have forestalled her for asking for help in such an intimate area of her life, and of the daily impact she had to live with as a result of

her pain. This was important complementary data to what she told us, to how she interpreted her changed relationship with the space and objects of her home, and to what we observed in her behavior during the immersion.

3. Search for meaning

This directive speaks to capturing the meaning generated within and assigned to specific environments and objects, which can include, but is not limited to, the examples we gave above, such as agents' intentionality and how social norms and power relations may be inscribed or contested in environments and objects. There are, in turn, a number of shorthand mechanisms for helping us to do this. For example, we find it very helpful to pay attention to where we see concentrations of resources, or, conversely, surprising absences (e.g. no televisions). Resources (or lack thereof) in a given area speak to people's values and motivations. For example, in a project in which we were comparing different ethnicities' approaches to well-being, we interviewed a Hispanic mother in Los Angeles who told us that she didn't have enough money to continue to attend a health group at her local community center. However, when she was sharing her environment we us, we found televisions and Nintendo games in her children's room. This suggested to us that her children (and very possibly her children's successful assimilation as Americans) were more important to her than her own health management – an important consideration when positioning well-being products to mothers with limited resources.[3]

We also train our ethnographers to be alert to what the space tells them about the power dynamics in a given context, and in turn, to analyze what that tells them about the social relations and needs of the office or household. To do this, we've drawn on Tilley's analysis above to create a series of basic questions - such as how knowledge is acquired or controlled, whether there are "disciplinary" spaces, who sets and enforces access to resources in the environment – that can be individualized for given projects into questions such as: how is parental authority expressed in a home? Are children's computers in public spaces, under the watchful eyes of their parents? What can this tell us about the means parents use to control their children's behavior and the tensions between them? Or how is power and authority exercised in physician's offices? To what end? And what impact might this have on patient-physician interactions? It's also essential to ask ourselves what *experience* this creates for our informants: we need to investigate how they accept, contest and negotiate these power dynamics. For example, what tactics might patients employ to assert agency in their encounter with their physicians? Do some spaces, such as examination rooms, inhibit this agency, and others, such as consulting rooms, facilitate it? This is no esoteric question for a client who, for example, is seeking to drive prescriptions through direct to consumer marketing, and needs to know the best route for empowering patients to

---

[3] Given this observation, we were struck by Miller's (2001) comments that in Clarke's chapter "The Aesthetics of Social Aspiration", she advances that "the home itself carried the burden of the discrepancies between its actual state at a given time and a wide range of aspirational 'ideal homes' that are generated out of much wider ideals that a household might have for itself [including] immigrants' aspirations towards assimilation" (Miller 2001: 7).

bring up a given medication with their physician, or indeed, even suggest an alternative to a physician's recommendation.

4. Read the dynamism in the environment

Methodologizing a sensitivity to dynamism and movement has proven less neat, but has proved consistently worth tackling, even if it requires a degree of improvisation from immersion to immersion. One tactic that has proven successful is to ask informants to walk us through routines so that we can see how space is used and where perhaps subconscious foci may lie. Another approach that's proven successful is asking people about the evolution of their environment, and asking them to accompany this narration with illustrations from the space around them: this inevitably gives us clues into the evolution of the person him or herself. For example, we had a client who wanted insight into how patients with weight-related illnesses such as Type 2 diabetes complied with diet and exercise regimens. They intended to use this information to design more effective support programs. The client was sensitive to environment insofar as they had asked us to look in informants' refrigerators to see what they "really" ate, and also asked us to make note of overt material examples of health management, such as exercise equipment. We did so, and it was helpful, but frankly, we didn't see anything fresh or unexpected. What did catch our attention, however, was how the environment reflected informants' relationship with time. To take two of the most striking examples, one seemed frozen in an ideal pre-diabetic past, and the other seemed focused on an ideal future, in which the structural constraints that inhibited her from complying with her physician's recommendations would be miraculously removed. We drew our initial evidence for both these interpretations from the informants' décor and their engagement with their homes. For example, the former felt static, like a time capsule: all the photographs on display were from the 1980s or earlier, the appliances were old and the general style and atmosphere felt dated despite relative affluence. The latter felt like a stage-set under construction: the informant's home was lovely but virtually empty after a year of habitation, because, as she put it, she wanted everything to be perfect and was willing to wait for it to be so. Our other informants conformed to this pattern, if not quite so dramatically. The first couple of immersions cued us to pay attention to this issue in the remainder of the ethnographies, and ultimately to approach the transcripts sensitive to how informants placed themselves in relation to time. It was thus that we found the crucial insight: our clients' target was habitually disengaged from the present, living instead, without necessarily being conscious of it, in a more comfortable past or an ideal future, both of which undermined the need for active self-management in the here and now. This insight proved pivotal in helping the client create patient support programs that actually spoke to patients' sensibilities and needs.

5. Ask the informant

This fifth directive may feel self-evident to ethnographers, in that we're obviously there to engage with the informant, and we're inevitably peppering him or her with questions throughout our time together. However, in this case, we specifically mean involving our informants into this process of engagement with, and interpretation of, the physical environment. This means that we make our interest and intentions explicit and we actively

invite our informants to tell stories about their spaces and things. And, as our immersions progress, we also share our emerging interpretations and hypotheses with them and invite them to challenge, correct or build on our ideas. Occasionally, this brings us to quite a new place. For example, in one study with Boomer parents, our ingoing hypotheses was that parents often disliked their children using electronics and online goods such as video games, the web and televisions because it removed their children from the social sphere, even while leaving them physically present. However, one of our informants illuminated a very different perspective with us as he gave us a detailed tour of the electronic pleasure palace he had built for his son: it was, effectively, a honey-trap he and his wife had built to keep their child home. Yet, as we asked him to describe the specific behaviors that accompanied each device, a new reality emerged: in fact, son and father were using the technologies to reach out to each other, by asking for help (father to son on the computer), by seeking to share favorite shows (son to father with the DVD player), or by gaming together. The clarity of this insight really was only able to emerge through both our informant and us delving into the material culture of the home, and its impact on social relations.

CONCLUSION

In the marketing and innovation context in which we work, we have found that our ethnographic practice is greatly enhanced, and thus brings greater value to our clients, by using the physical environment as an informant that helps to tell a much richer story about our informants' lived experiences. On the whole, we have found that the approaches outlined here have consistently yielded meaningful results that helped us deliver our clients insights and strategic recommendations that opened up new opportunities that we would have missed otherwise. Specifically, these approaches have allowed us to gain insights beyond immediate problems or brand contexts, which in turn has enabled us to discover unexpected and unanticipated sources of insight and inspiration, illuminated the different ways in which broader contexts introduced needs and tensions into the lives of informants, and enabled us to decode myriad drivers of what people do (and don't do) – in short, everything we seek to do in our applied ethnography.

While the approaches and framework outlined in this paper represent a very simple way of trying to incorporate decades of provocative and thoughtful work on phenomenology and material culture studies into a manageable but enriched practice in marketing-oriented ethnography, we would posit that the essence of what we've described here has application in other applied contexts too, from healthcare policy development to web design. This belief is based on, not just our own experience, but the continuing commitment in anthropology to engage with the spaces, places and objects that make up our informants' physical and social worlds, the rich perspectives from which suggests to us that to overlook informants' physical environments in any context is potentially to miss some of the core aspects of their lived experience, which surely must always be relevant to us. Of course, depending on the specific applied context, there may be different emphases or approaches

that are more or less relevant, but we would encourage other practitioners to explore where these possibilities and limits lie, and, ultimately, to share these perspectives in a wider disciplinary discussion of how to maximize our collective understanding of the value of considering the environment as an informant, and how actually to do so within our respective fields.

ACKNOWLEDGMENTS

REFERENCES

Arnould, Eric and Wallendorf, Melanie
1994   "Market-Oriented Ethnography: Interpretation Building and Marketing Strategy
        Formulation," *Journal of Marketing Research*, 31 (Nov): 484-504.

Bourdieu, Pierre
1977{orig. 1972}). *Outline of a theory of practice*. Cambridge: Cambridge University Press

Clarke, Alison
2001   "The Aesthetics of Social Aspiration". In *Home Possessions: Material Culture Behind
        Closed Doors*, ed. D. Miller. Oxford: Berg.

Deasy, Dorothy, Lucken, Erik, Dowell, William, Gscheidle, Gretchen and Leenhouts, Laura
2007   "The Built Environment: Exploration toward a New Paradigm". *Ethnographic Praxis
        in Industry Conference Proceedings,* October 2007, Vol. 2007(1): 140-145.

Feld, Steven and Basso, Keith
1996   *Senses of Place*. Santa Fe, New Mexico: School of American Research Press.

Gell, Alfred
1998   *Art and Agency*. Oxford: Clarendon Press.

Jones, Rachel and Ortlieb, Martin
2006   "Online Place and Person-Making: Matters of the Heart and Self-Expression".
        Ethnographic Praxis in Industry Conference Proceedings, September 2006, Vol. 2006(1):
        214-228.

Low, Setha and Lawrence-Zuñiga, Denise, Eds.
2003   *The Anthropology of Space and Place. Locating Culture*. Malden, MA.: Blackwell

Publishing.

Mariampolski, Hy
2006   *Ethnography for Marketers.* Thousand Oaks, CA: Sage.

McCracken, Grant
1988   *Culture and Consumption: New Approaches to the Symbolic Character of Consumer Goods.*
        Bloomington: Indiana University Press.

McCracken, Grant
2005   *Culture and Consumption II: Markets, Meanings, and Brand Management.* Bloomington:
        Indiana University Press.

Miller, Daniel
1998   *Material Cultures: why some things matter.* London: Routledge.

2001   *Home Possessions: Material Culture behind Closed Doors.* Oxford: Berg.

Radka, Rich and Shieh, Lillian
2005   "Defining the impact of physical spaces on social interactions". *Ethnographic Praxis
        in Industry Conference Proceedings.* November 2005, Vol. 2005(1): 218-223.

Seamon, David
2000   "Phenomenology, Place, Environment, and Architecture: Review of the Literature".
        http://www.arch.ksu.edu/seamon/Seamon_reviewEAP.htm (last visited April 17,
        2008).

Sherry, John F.
1998   *Servicescapes: The concept of place in contemporary markets.* Chicago: NTC/Contemporary
        Publishing.

Sunderland, Patricia and Denny, Rita
2007   *Doing Anthropology in Consumer Research.* Walnut Creek, CA: Left Coast Press.

Tilley, Christopher
1994   *Phenomenology of Landscape: Places, Paths and Monuments.* Oxford/Providence: Berg.

Tuan, Yi-Fu
1977   *Space and Place: The Perspective of Experience.* Minneapolis, MN: Univ. of Minnesota
        Press.

Zafiroglu, Alexandra and Asokan, Asokan
2006   "At Home in the Field: From Objects to Lifecycles". *Ethnographic Praxis in Industry
        Conference Proceedings,* September 2006, 2006(1): 138-143.

The Space Between Mine and Ours: Exploring the Subtle Spaces Between the Private and the Shared in India

ASHWINI ASOKAN
User Experience Group, Digital Home Group, Intel Corporation

Starting from their interactions within shared spaces and use of shared objects, to large social networks, the Indian society has developed a range of ways to incorporate subtle gestures and systems into their lives that neither forces them to share all their time and space with everyone, nor isolates them completely. This paper explores this idea that privacy is not always mutually exclusive from shared states. In the process, it highlights quality of time and space as a construct of subtle negotiations between the socially structured and personally desired. These subtleties allow Indians to design their lives around extensive grey spaces that exist in between the community and individual. This suggests some new ways for us to think about meaning of privacy, and its impact on how people in countries like India navigate complex social networks, cultural systems, and rigid social hierarchies, very often using technologies like phones and TVs.

INTRODUCTION

"What do you mean private? Do you mean like no one else knows? … Like a secret?" As an Indian in the US, making a visit to homeland to do research, this quote from one of my field interviews was one of the first things that hit me hard, reminding me about what it was *really* like being Indian. Obviously asking a family of four that slept in one bedroom in a 3 bedroom home, about what they did in their private or quiet time or places didn't seem to make any sense to them. And then it occurred to me, that as designers and social scientists, we have long been fascinated with phrases like "my time or your time", "quiet time", "my privacy", "my home is my castle", that we have taken these phrases for granted and universally applicable, as measures people use to differentiate the individual versus the group. The evidence for this, amongst other things, lies in the design and description of many of our technologies today. The cell phone making people "always available", the web and wireless enabling universal access to information, passwords hiding or making information secure, cell phone family plans with each family member owning their own device, are but a few examples that have made 'the private' and 'the public' a choice between black or white.

It is critical to discuss the nature of transitions here in order to understand this state of the individual & the community, the private and the shared, in India. EPIC 2006 explored the theme of transitions. Many papers exploring transitional times and space [Ken, Rogerio & Motorola Labs] wonderfully challenged some of these assumptions above. Anderson & De Paula highlighted how corporate efforts in design and development were disproportionately skewed towards Euro-American values. They claim that transitional space and time between activities are momentary from the Euro-American point of view, but differ considerably in other cultures. This momentary space is always subject to exploration

for how to increase productivity, while in it. Metcalf and Harboe challenged the notion of "always available" by describing the process of peeking and negotiating transitions between times they identified in their research. Both these papers made the case for transitions as being critical to weaving daily life activities together, as a negotiation between multiple states often determining the outcome of the next state or activity while having a meaning and context of its own. But what if the two activities before and after any given transition, are constantly in states of flux or transition themselves? What if every space is a transitional space and every time is a transitional time? What if they are not space and time *in between* but they *are* the only kind of space and time that exist?

This paper describes how the structure of life and society in India enables people to constantly stay in these different states at any given time and space. It specifically deals with space, with every space being both "private" and "public"; "mine" and "ours". As a result, the process of performing an activity can involve constant mediation between these states. Furthermore, spaces in most homes are meant to be shared spaces, giving any family member the right to walk in at any time to do anything they please. Many families are still joint families and have been that way for many generations. The same holds true for many places outside the home. It is hence hard, to classify a space as private or shared. Over the years, Indians have developed sophisticated ways to make themselves visible or invisible depending on the context of their surroundings. This paper is an exploration of the practices of visibility and invisibility surrounding negotiation of the individual and community in the daily Indian life.

METHODS

This paper uses research from three studies: an Ethnographic research project: "Social Lives of Television" (Dec 2005), a Design Research project exploring privacy in the Indian household (Jan 2006), and a Design Research cum Focus Group testing of usages and product ideas exploring opportunities in the 'Emerging Markets' (Mar 2008). The three studies were conducted at various points in the last three years for different efforts exploring the place of TV and other technologies in the home. This paper analyzes research stories from across these different projects conducted in India, in an effort to explore the invisible spaces between the individual and the group, the private and the shared.

The families recruited for the ethnography research ranged between four to sixteen person households with two or three generations. We conducted in-home interviews, with home tours, and a photo journal exercise with families to explore their daily lives, the place of technology and specifically that of the TV. The men and women we interviewed as part of the design research and focus group findings in 2006 and 2008 ranged between nineteen and fifty two years. One design research session exploring privacy and practices (2006) brought together women between 40 – 52 years of age. Participants brought an artifact from their home that best represented who they were and what they wanted to share about themselves

to the group. The group then drew their ideal TV which they then used as a means to talk about existing hierarchy in the household, what they did to bypass the rules of the hierarchy, their role in the home, and the subtle negotiations they had to perform through out the day in order to enjoy what they wanted as an individual always in the midst of a family. The mapping exercise with youth aged 19 – 25 allowed them to draw connections between places, devices, and activities they performed and the people they did them with. Once again, this provided the start to a discussion around private and shared spaces and activities, and the mediation between multiple social networks. Conducting separate activities with many women in one room and with younger participants individually or in twos helped generate an honest discussion on a topic that is typically not discussed in the open. Participants were not comfortable with questions that had the word privacy in them. The society views privacy as a negative word that isolates people instead of bringing them together. Exploring practices that participants indulged in, extracting stories of identity and their role in the home, their use of technology and the importance of place and others as part of those practices helped get at conversations surrounding issues relating to negotiation of the individual and the family or society. Objects and drawings were critical as artifacts that aided in storytelling and building off on each other's stories.

Finally, throughout our research we were alert to the possibility of stumbling on larger social networks of people that would tell us stories about use of technology and content that were intentionally kept invisible by people due to fear of legal and societal issues. Shop keepers, technology repair men and visits to the illegal bazaars were all essential to understanding this landscape of use of technology. Some of the stories in this paper highlight the importance of being connected to the hidden social networks in India in order to understand the lifeline of this society.

RELATED RESEARCH

As ethnographers, designers and social scientists, we have as a group of researchers, spent much of the past few decades exploring the concept of privacy and its implications for the things we design or innovate. This has resulted in a variety of interpretations of practices surrounding privacy. Some of these studies suggest that there exist some parallels and contrasts to this notion of grey spaces in other cultures and demographics. The first set of such parallels show the presence of both private and shared spaces within one given place. Technology is used to mediate activity within the two states. March & Fleuriot's work on Girls, Technology and Privacy highlighted SMS and PC based IM as spaces that allowed girls to operate privately within the constraints of a shared place in the home. The silent nature of texting as enabling private conversations has also been explored in the context of Japanese homes where quiet interactions are expected in the small home space. The second parallel was found in Anderson and De Paula's work on the "we" affect in transitional spaces. They suggest that familiar strangers who travel together on a bus enable a collective experience that exists in a moment of group solidarity and interactivity. These people create a space in between that revolves around enjoying as a group. We found similar groups of people in our

research in India come together temporarily around content and technology use. Familiar strangers are essential to fulfilling the need to share and be a part of something outside one's own family and friends. They serve as a 'public' outlet for enjoyment around content and activities that are to be kept 'in private', which means away from family. A third parallel was found in the discussions of security in HCI. Exploring privacy has plenty of implications on the discussions surrounding security in this field. Security is typically discussed as something required to safe-keep content or information, device and user identity in HCI. It has been highlighted as a barrier, a gate or a locked door that "keeps things out", specifically threats of different kinds. [Paul] In our research, keeping things out of shared devices meant mediating access between members, hiding things from being accessed by everyone that used them. The explanation went beyond just keeping technology safe from hacking, viruses and other security threats typically discussed in HCI literature. Safekeeping identity, content and material from users or those that had access to shared devices in the home, is mainstream to our discussions surrounding privacy. Privacy has also been described as possibly the greatest barrier to the success of ubiquitous computing. It is discussed as an issue that comes about as a result of wireless and everywhere computing, and a resulting fear of abuse. On the contrary to some of the notions around security in HCI and Ubicomp, this paper explores how networks and interactions everywhere across space and time with large groups of people, is used as a way to keep information secure and protected from certain people, constantly removing any source of identification.

"THIS IS *OUR* ROOM, *OUR* PC, *OUR* BED ...."

It is easy to be misled by participants who use 'we' and 'our' in every sentence inresponse to any question the researcher has. First impressions of an in home interview paint a picture of absolute community ownership, with no space for the individual. The existence of extensive shared spaces and objects everywhere in the home and in the way people speak about ownership, makes it an interesting place. It is ripe with constant undercurrents of tension and negotiation between shared (ideal) space and individual activity throughout the day. This section of the paper describes the physical, social and religious structure of the Indian home, highlighting the places of conflict and negotiation, and the visible and invisible practices resulting from the negotiation, that define most of everyday life for all family members.

Shruti was a 25 year old (2006) who lived in an individual house owned by her uncle in the US. She lived with her parents, her brother (21), and her two grandparents and they formed the Mani family.

Figure 1: Shruti & Family at their TV
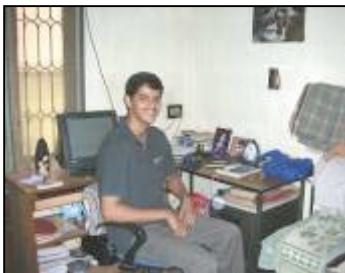
Figure 2/ Vasa's Escape – Their PC

Figure 3. The bedroom where they sleep THE BEDROOM WHERE THEY SLEEP

The bedroom and the living room are where most of the activity takes place in the Mani household. The living room has the TV taking center stage for a large part of the day. It's where Mrs. Mani and her mother in law do their chores during the day with the TV on. It's where the family gets together in the evening either to watch TV or to simply sit around the TV doing their own things. The bedroom is where the parents and the children sleep next to each other. It is also where the PC, the music system, a telephone and an iPOD sit. Hierarchy in the household mandates that children allow their grandparents and parents to have control of the TV on weekdays, being free to join them, watching soaps. One often notices how everyone in the living room has their own activity despite being together. The sister can often be seen sending an SMS on her cell phone, sharing the phone with her brother who also gets SMS from his friends on the same phone. The mother is seen having her attention divided between cooking in the kitchen and the TV show, the father reading his newspaper or book while peeking at the TV every now and then from another part of the room.

Vasa, the son is not a big fan of these TV shows and escapes to the bedroom during the evenings to do his homework or use the PC. The parents and the sister often have to walk into the bedroom to get some of their clothes or do some of their own activity there. Vasa keeps his door partially closed. This suggests to the other family members that he is doing his school work and requires that he not be disturbed. Other family members try to quietly walk in and out doing their chores without disturbing Vasa. The same holds true when

Vasa's friends are over. The other family members will stop in the room to chat with his friends and offer them food. But the partially closed door is a request for other family members to not disturb him and his friends too much. If Vasa or anyone else is on the PC on the other hand, people freely walk in and out and peek over their shoulders every now and then to see what they are doing. If his mom notices that he is chatting with someone, she asks him who it is and joins the conversation if it's someone she has met before or if it is a relative that Vasa is chatting with on an IM. Sangeetha dictates what she wants typed and Vasa types: "Mom says hi to you". From a two way chat, it changes to a three way conversation. It is highly likely at this stage that the dad and the sister join the conversation uninvited like the mom, if the person on the other end of the conversation is someone they know as well.

This simple evening schedule and space of the Mani household in Chennai despite looking mundane and slow is filled with stories of how people mediate the private and the shared. **Firstly,** the hierarchy in the living room puts the grandparents in the center stage with everyone else doing their own activity partially involved with what is on TV. The distance from the point of control (the remote control) is correlated with their engagement in some other task.

- The ability to engage in individual activities within a shared space provides a degree of control over private space; the cell phone is an escape into the digital world of communication, the newspaper or book is a way to retreat into one's own thoughts, and cooking is a temporary retreat into one's own space.

Each family member is now readily available to others if needed and is also effectively cut off from them at the same time. This provides the individual with the power to switch between states at any point of time. Any activity can switch between shared and private depending on the flow of activities and people through the home as seen in the examples above. The flow continues and changes priority as and when needed; the daughter completes her SMS and helps the mother in setting the table for dinner. The *power to be in multiple states* within a shared space and *the ability to mediate those states* is a simple but powerful concept for the Indian families. The concept of "always available" also comes with a powerful ability to be "efficiently unavailable or private".
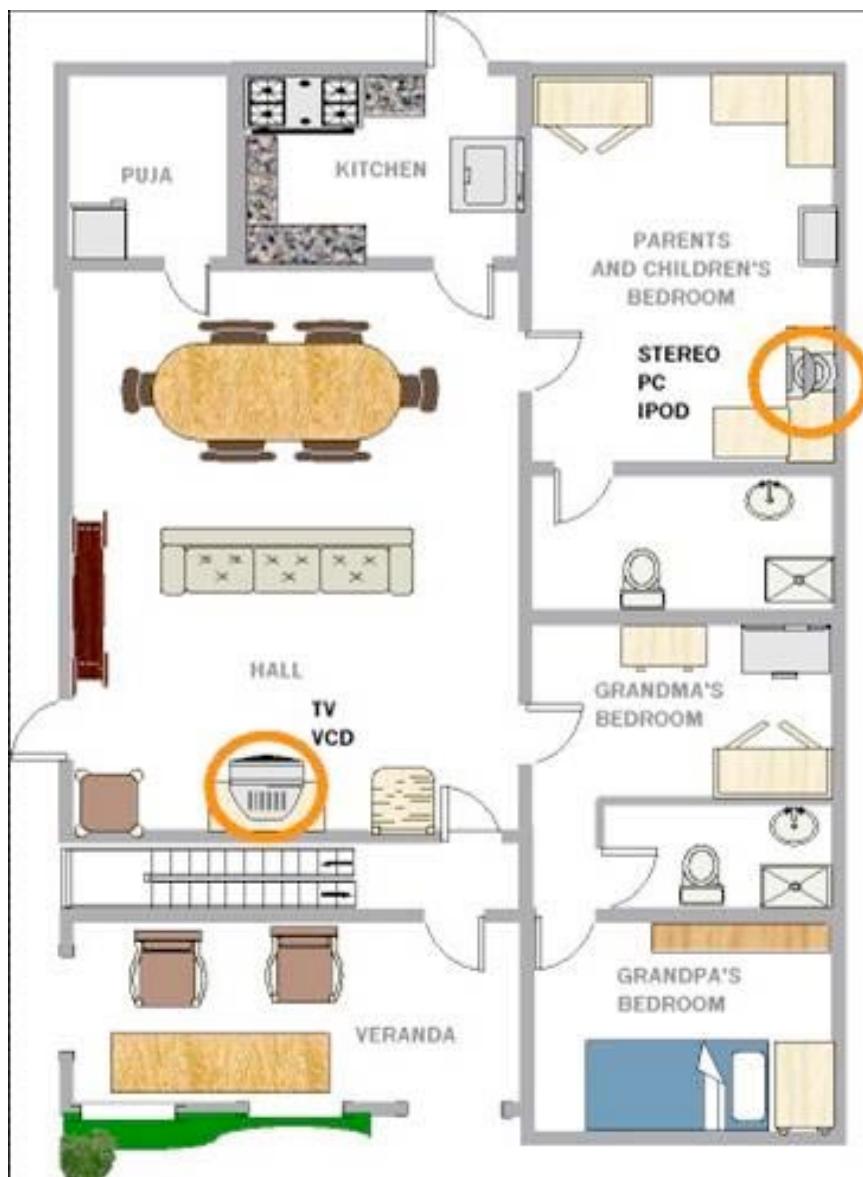
Figure 4. Home map of the Mani family

Secondly, the constant flow of people and their activities in the bedroom where one main activity takes center stage during the day – typically either of the son studying, friends playing or the daughter practicing music, imposes the need for a kind of *subtle negotiation and empathy*. The partially closed door suggests "don't enter unless you have to, my education is important but if your activity is urgent, do it quietly".

- The subtle nature of partially closing the door is critical to providing enough scope for both the person walking in and the person inside to convey what they want, either the sense of urgency to do something or the sense of "leave me alone if you can". The resulting action is influenced by an instant understanding of each other's context allowing for a smooth negotiation of the individual and the shared space. The multiple sub contexts within the shared bedroom allow the son to go on with his work quietly and the mother to do hers in another corner if she had to enter.

Figure 5: Deepa on her cell phone

Thirdly, this negotiation is not always as smooth, obvious and open. Deepa, a 22 year old from another family explains how she has to alternate between tabs on her PC every time her parents enter the shared second living room where the PC was. She doesn't want them to know who she talks to, what she talks about, or that she frequents social networking sites. She expects her parents to look over her shoulder like every other Indian parent, to participate in a chat with the person online or simply look at what she's doing. She has multiple tabs open and quickly presses ALT+TAB to move to another window or application. She also keeps smaller chat windows open to the right side of the screen knowing she will have time to hide them since her parents enter from the left. Similarly, Deepa and her friends always keep their phones on vibrate; this allows them to wait for an opportune moment to call back. This also means avoiding the attention of the family who might want to know who was calling, what they were saying, or if it was a boy or a girl! Sometimes she locks her cell phone with a code so that if the phone is left on the table or some other accessible location, details of who she talks to or her messages are not available for her parents to see. When asked by her parents why she needs to lock her phone, she would claim that the need for security outside home makes it the default mode she leaves it in. Teenagers and young adults have developed subtle ways to hide or keep some of their practices successfully invisible even in shared spaces. On the other hand, to ensure that she's not alienating her family or have them suspect her, she proactively shares jokes, videos, photos and content on her cell phone with her parents everyday.

- The shortcuts and workarounds they have developed equip these groups of technology users with powerful ways to carve out their own space in the heart of social activity at home. Deepa's cell phone story further endorses this notion of shortcuts and workarounds. They have become powerful and subtle tools that users of technology have found to mediate their own space at home.

Figure 6. Shrini Family kids

Lastly, invisible negotiations for privacy in shared spaces are considered a privilege given by family members higher up in the hierarchy to those below them. The Shrini family is a classic example of this. Mr. Shrini, father of two sons (11, 17) explains that the TV watching rules for children are strictly enforced in his household. The boys are not allowed to watch anything Indian movie related, and only sports and cartoon shows at certain times. He knows however that his children watch movie related shows when he isn't around. "Children are allowed to deviate from rules every now and then because that's what children will do. But their respect is evident in the way they switch off the TV when they know my car gets in to the parking lot."

- Enjoying activities that need to be rationed in private is often considered a privilege that is given to children when they demonstrate responsibility. Respecting family, hierarchy and age is a key part of what is considered responsible. The notion that private space and individual freedom can be enjoyed, though within the constraints of rules set by hierarchy and the respect demanded by elders, is predominant in the Indian household. The negotiation for this space is once again, subtle and even invisible sometimes. The subtlety allows all family members to enjoy themselves within limits and even deviate from set rules in order to fulfill their need for a particular kind of space for themselves. This again, does not mean that the space is owned by the individual. It is a portion of the shared space that is given to the individual by his/her family in order to enjoy a certain amount of regulated freedom that is appropriate for their age and place in hierarchy of the home.

LEAVING HOME TO SEEK PRIVACY IN PUBLIC SPACES

It is evident from these stories above that families are perpetually in a state of sharing or togetherness while performing tasks that are highly individualistic. They have clearly developed extensive mechanisms in place for mediating ownership of objects, space and time in the home. The participants interviewed in our research told us stories that typically fell into 4 main categories that helped them mediate space; The first was sitting together to do activities, the second: sitting together but doing their own activities, third: leaving one room and going to another where you expect minimal interference and finally, leaving home to go out into the public to seek time and space away from home. The first three categories have been discussed in the section above. But the irony of leaving home for public places in order to seek privacy deserves to be explored in detail. People we interviewed were leaving home in search of an environment where freedom of action was possible and enabled them to enjoy "their own" time and space. What is evident in this process is that time away from home for privacy means space to hide one's activity from people in the home. But this is invariably time spent with more people with similar interests and requirements for 'freedom'.

Figure 7. Playing at the gaming cafe

Stories from the participants made it clear that the question of privacy is not one about individual space and time; it is an issue of deciding where something could be visible and where something had to be invisible. This space outside home enables users of technology to consume content they are not allowed to at home, to speak with people and to engage with technology in ways they would not have the freedom to do normally. Parking lots, internet and gaming cafes, coffee pubs have hence become popular places to hang out for this reason. The goal is not to enjoy movies, music and other activities prohibited by the family in isolation in public it is to enjoy those activities with a different group of people. In other cases, the public is a trusted network of people outside the home that enable safekeeping of activities, secrets and objects like money in order to overcome the hierarchy, control and rules of members in a household.

Hemant (30) like most Indians today, watches videos, movies and listens to songs on his cell phone along with his friends. The content is stored in the cell phone's flash (memory) card. In order to ensure that other family members do not get hold of what is sometimes 'A' (adult) rated content or even simple Bollywood content they do not want their children to watch, he and his friends often hide away the flash cards with other friends. Spreading content with friends and networks was a common way to safekeep personal content. Suraj (21) often goes to the gaming café a few streets down from his house. He prefers that one specifically because people outside can't see inside. His parents do not allow him to play games during the school year at home. He uses different excuses to leave home and

Figure 8. The gaming cafe

uses saved up money to play at the gaming café every week with his friends in secret. Almost all the women we interviewed in a design research session told us how they stashed money away with friends and family on the outside so that they could spend it on their children or their brothers to buy them things that their husbands didn't necessarily approve of.

- In all of these cases, people and spaces outside the home were as critical to maintaining one's own space, as the inside of the home. The home is typically

viewed as the place that protects people from shared community spaces, and in this case is treated like what we would imagine a public space to be. The public space on the other hand, viewed as open to all, provides extensive protection to the individual, empowering them with a lot more freedom than they would have within the social rules of the home. The public spaces crowded with people and activities, offers a degree of anonymity, and as a result – privacy. It was for the same reasons that participants we interviewed enjoyed interactions with strangers, shop keepers and people they didn't know creating momentary shared experiences in private and away from the home and family.

MEDIATING INDIVIDUAL SPACE ACROSS MULTIPLE SOCIAL NETWORKS AND SOCIAL SPACES

As a result of moving constantly between the home and other places in the community, there is a problem of ensuring that certain kinds of content, technology and information is accessible by only a certain set of people. And in India this means mediating between immediate family, extended family including cousins, uncles, aunts and grandparents, friends from school, college, neighborhood, dance or music classes, shopkeepers, café owners, people on the road, and people one chats with while drinking tea at a corner shop. Eventually in life everyone shares content and information with all of these people in some manner. The problem is now scaled to multiple social networks, multiple social spaces and regulating access to space and information across all of these.

Eish is a 29 year cell phone shop owner, the youngest of 6 brothers in his family and one of two unmarried brothers. Unveiling his shop and his contact opened us to a whole hidden social network system revolving around the use of technology and content. It can be seen as an elaborate system that has carved out personal space in the form of physical social networks for a new generation of technology users.

Figure 9. Viewing 3-hour movies on the cell phone

Figure 10. Loading flash cards full of movies and music

Figure 11. Showing off the flash card loaded with content

As a cell phone shop keeper, Eish has setup a business that lets him sell Sim cards, new and used cell phones, repair cell phones (through his friend who owns a cell phone repair shop). But seeing that his friends and their networks of friends had figured out how to enjoy movies on their cell phone, he decided to expand his business to include selling cell phone content to his customers. Piracy of local language Indian movies is illegal and the law is being enforced to protect the local film industry in each state. This however, creates holes in the system allowing people to rip and copy all other language content freely. Using online software that allows the transcoding of video or music to a cell phone format, users transfer content to their cell phone flash or memory cards, enjoying content on the go on their small mobile screens. This leads to people trading flash cards with each other with content unavailable to others. Eish decided to plug himself at the heart of this new trend. Not only does he use his contacts to get content from online sources, he also uses his contacts in the illegal bazaars to get content that is unavailable in the local city. Using word of mouth he has spread the news of his access to content through his customers and has now become a key player as a content provider. He sells copies of the newest movies and content to one or two PC users in each neighborhood, who in turn have become content providers for that neighborhood. Local language movies, songs, new English releases, A or R rated movies all became part of this circulation.

None of the participants we had spoken to until this point mentioned any of this to us. It was clear that this entire system is below the radar, something most people know about and participate in but no one speaks about. People get their content through multiple levels of social networks. One couldn't know about these networks unless they were connected and participating as customers or content providers. "Who you know, and how you connect to them is critical to how much power you have in this network", Eish explained. This public network of mobile phone users is well protected. The content is freely available in these networks. Users didn't have to store or save the content since it was always in circulation at a very low cost. The lack of storage required in a system like this further provides the kind of privacy people are hoping for at home. One part of this content never enters the home and the other is shared together with family. One does not have to worry about being caught with inappropriate content. Flash cards are mobile and can easily be stashed with anyone outside the home; content can simply be accessed from the network, and Bluetooth and infrared communication allows an instant transfer of content for safekeeping to other cell phones. The network also has a built in security system, with lack of traceability because of the massive nature of these networks and the extent of content proliferation. This encourages users to freely participate without fear of being tracked down. After initially being surprised to hear of how many flower and vegetable vendors on streets were content providers, we eventually understood that it was this nature of informal networks, the subtle communication, the access to know-how on where to go and what to find, that make this system so efficiently private and shared at the same time.

One set of the teenagers I interviewed explained how they upload some of the content that is costlier into online storage sites. The web is being used as a way to store content privately away from the family. Storing content on the computer increases the scope of

parents discovering their children watching movies and songs during the school year. So just like leaving home is one option to create a space for one's own activity, these cell phone users are using the internet as another way to stash their content away privately. There is constantly a need to manage what comes into the home, leaves the home, what is available to family or to different networks of friends. The web in this case, is hence being used to keep information secure and safe which is contrary to the way the internet is typically spoken about – as open for all with no safety of privacy. The ability to use the internet as a place to hide information from those that are not proficient at using the internet makes it safer than any other solution for these participants.

LIVING IN A SOCIETY THAT SAYS PRIVACY MEANS YOU HAVE SOMETHING TO HIDE

Language can be useful when trying to understand how people perceive concepts. The fundamental need to do such extensive mediation at every place in the Indian society we have seen is a result of shared ownership of spaces and communities. But social taboos make it even more difficult to manage this mediation process. Below is a set of quotes collected from our in home interviews that reflect some of the notions surrounding the word privacy in the Indian society.

> "Every time we go to the US to visit family, we have to sleep in our own room. Everyone has their own room; we all don't talk through the night and sleep together in one long room anymore. All that's gone now in the name of privacy"

> "What do you mean privacy? With a house full of kids and in laws, that would be abandoning my duties"

> "My parents will kill me if I tell them not to touch my things because I wanted privacy. In fact they'd figure out I was doing something wrong if I said so. So I can't be that dumb and put myself in trouble. In fact, I almost always share stuff on my cell phone with them to make sure they don't think I'm doing things I shouldn't be doing with my cell phone"

In all of these 3 examples, privacy is described as something wrong, as isolating, rude, anti-social, selfish, taking time away from family and duties and as something required when one needs to hide something or is doing something against commonly accepted rules. The language surrounding the word privacy is extremely negative. Locked cell phones, alternating between tabs and windows of browsers to hide one's activity, keeping doors partially closed so that people wanting to hide or engage in a private activity can hear when they creek open, deleting history of search, calls and website links from cell phones and PCs, leaving home to seek privacy in public spaces are all intelligent workarounds that the Indian people have learnt over time to negotiate privacy in their shared spaces.

As mentioned before, Indians almost always answer questions starting with 'WE' and never talk about just themselves. They ensure that they talk about other people doing the same things that they do. The sense of togetherness and community allows people to justify their actions as being acceptable and common. This also explains a large portion of why people prefer escaping into public or shared spaces in order to mitigate the effect of pursuing private activities.

This is also why technology and specifically mobile technology is successful in India. It has provided an appropriate retreat for its users from this predominantly social community of people. The flexible nature of the networks, shortcuts and workarounds that people have created using it, have supported the key theme of subtlety that seems to be integral to every Indian.

THE ROLE OF MEDIATED SPACES IN TECHNOLOGY DESIGN

I stumbled across the significance of this particular research theme earlier this year, from research projects conducted over the past 3 years. My current explorations of the life and practices in the emerging markets and the design of product concepts for them led to the direct influence of these findings on product concept generation. In this conclusion, I share the implications of these findings on the design of products and services for the Indian market.

- First, constant movement between different rooms in the home seeking space away from the immediate shared activity turns people towards rooms where other relevant technologies are present. TV tuner cards for PCs are becoming increasingly popular in the Indian market. The single shared TV often placed in the living room is being compromised by those further down in the hierarchy in favor of PCs with TV tuner cards, mobile phones or MP3 players. With rapidly growing disposable income to add to this state, the middle and upper class communities are now looking for new ways to embellish their home with technology as a way to make the most of their negotiation of individual and shared space. Music players in the kitchen are another example. This device allows the women to follow their religious chants and prayers in the morning while cooking at 5.30 am, long before any one else in the house wakes up. This removes any dependence on the PC or the bigger music system usually placed in the shared bedroom of the house, not usable until the rest of the family wakes up.
- Second, multi functional devices in the home that provide redundancy and overlap in compelling features like providing TV / movie content across the house are viewed as highly valuable. With most activities happening in shared settings, the ability to do anything one wants and not be limited by the few specific functions of each separate category of device is desired. Multi purpose devices are hence preferred over single purpose devices. On one hand, they are perceived as more value for money and on the other, they are viewed as conducive to choosing any

function or application that they are deprived of when family members are using other similar devices. The need for new categories of devices beyond the PC, the mobile phone and other consumer electronic devices we know today that fit this profile, which blur to the center of specialized categories we talk about today should drive innovation in this space. All product concepts that were designed using this principle tested high in our research.

- Third, similar devices owned by each person in the family are still viewed largely as indulgent and private (selfish, extravagant etc.). Product concepts that were built on a model of centralized shared resources in the home with autonomous end units floating tested the highest in our concept testing research sessions. Centralized shared resources of any sort were considered easier to manage from financial and social perspectives. Individual autonomous units that were tethered to the central point reflected the same notion of the individual and shared spaces that we noted in our exploratory field research. They gave individuals the ability to use their own technology while knowing that they could be shared if needed. Participants even envisioned the use of one set of individual units that would be owned by all as common resources for use in the home, and each member would still be able to have one end unit that they could call theirs and maybe even take it outside the home as appropriate.

- Fourth, mobile applications are critical to this community that is constantly on the move between rooms in the home and different places outside the home. There is a deeply felt need to take content from one device to another when shifting between different activities, different social networks and spaces for the reasons mentioned above. Mobility is power to mediate access and privacy between different people and places. With broadband and wireless networks still at their infant stages in the country, people do not expect to make seamless transitions of their digital content without their flash cards, CDs or USB pins. Innovations in connectivity and device networking will be critical to empowering these mobile communities. People are tired of waiting for centralized infrastructures like broadband connectivity to fall in place. Innovation in this space should consider the success of the mobile infrastructures and make use of similar patterns in the market.

- Fifth, as seen in most of the research findings described above, social networks are critical to access and mobility which enable space mediation and ownership. Technology is increasingly playing a big role in enabling social networks of various sorts, particularly surrounding content sharing. Networks are key to safe-keeping, information sharing, access, power and identity. Enabling peer-to-peer applications, intelligently integrating networks as parts of business models and content provision will be critical to the technologies we design.

- Next, mediating access to content in subtle ways will be the key to success of any new innovation in technology. Passwords, logins and other obvious ways to demarcate ownership as seen in the examples above, violate social and cultural rules that look upon privacy as a negative concept. With multiple social networks and the need to regulate access between them, this will certainly be a challenge and an opportunity to create value.

- The CHI community has long explored contextual awareness and pattern recognition that use past usage patterns to predict future actions and provide recommendations. Proactively suggesting solutions or giving recommendations might reveal activities of people with one social group to another. If such information is accidentally revealed across these social networks, the user is presented with the problem of no privacy. Inappropriate content shared with friends might show up as recommendations for sharing when sharing a certain kind of content with family on a mobile phone or TV, for example. Innovation in device and system intelligence should consider the nature of sharing as one that happens across networks and the nature of devices as partly private and partly shared in order to cater to a market like that of India.
- These findings also have extensive implications on the way we think about security. Most discussions in CHI Community interpret security as fear of threats from unknown sources online and on networks. While this maybe true in many countries, security in India is interpreted as safekeeping and mediating access between groups of people. Security and privacy cannot just be explored by looking at what needs to be hidden and who's attacking whom. We need to understand the implications of space and time and the invisible actions that happen within them. Be it parental controls, importance of the network in safekeeping content, uploading content to the internet to hide it from the known people – many of these exist in contrast to most accepted definitions and understandings of security. Looking at this breadth of interpretations of security can help us enrich the security and networking solutions we design for this market.

ACKNOWLEDGMENTS

REFERENCES

anderson, ken and De Paula, Rogerio
2006   We We We All The Way Home: The "We" effect in transitional spaces. *EPIC 2006 Proceedings*

Beckwith, Richard
2003   Designing for ubiquity: The perception of privacy. *IEEE Pervasive computing*

Dourish, Paul; Grinter, Rebecca E; Delgado De La Flor, Jessica and Joseph, Melissa
2004   Security in the wild: user strategies for managing security as an everyday, practical problem *Personal and Ubiquitous Computing*; 8(6).

Hong, Jason I; Ng D, Jennifer; Lederer, Scott and Landay A., James
2004   Privacy risk models for designing privacy sensitive ubiquitous computing systems. *Designing Interactive Systems Proceedings*

Ito, M. and Okabe, D.
2005   Intimate Connections: Contextualizing Japanese Youth and Mobile Messaging *in* Harper, R., Palen, L. and Taylor, A. Eds., *Inside the Text: Social Perspectives on SMS in the Mobile Age*

Metcalf, Crysta J and Harboe, Gunnar
2006   Sunday is Family Day. *EPIC 2006 Proceedings*

March, Wendy and Fleuriot, Constance
2006   Girls, Technology and Privacy: "Is my mother listening?" *CHI 2006 Proceedings*

Zafiroglu, Alexandra and Asokan, Ashwini
2006   At Home in the field: From objects to lifestyles. *EPIC 2006 Proceedings*

Drawing from Negative Space: New Ways of Seeing Across the Client-Consultant Divide

MICHELE FRANCES CHANG
Red Associates

MATTHEW LIPSON
Orange/France Telecom

Focusing on the client-consultant relationship, well honed, but perhaps overly so, this paper aims to shed light on the conditions that at once streamline and challenge our collaborations. To do so, we borrow a page from the visual arts; namely an experimental method of representation called negative space drawing. In both its aim (to create a picture from a new perspective) and challenge (to shake off the preconceived notions that limit us) drawing from negative space reflects a similar dynamic to our own. By way of a case study commissioned by one author and conducted by the other, we sketch a framework of negative space which examines our respective biases and agendas and our endeavors to resolve them.

> The purpose of this exercise is to develop facility at perceiving objects as physical shapes rather than as verbal descriptions. This exercise makes us "see" an object in an unusual way, and can help us draw what's actually there, rather than what we think "ought" to be there.
>
> Robert Gardiner, the University of British Columbia

INTRODUCTION: CHALLENGING OUR ROLE IN THE VALUE CHAIN

Practicing ethnographic research in industry finds us at a particular moment in time. We have seen qualitative research of our 'persuasion' establishing a foothold across corporations and across the world. Settling down in a number of comfortable, synergistic spots where our brand of people based insight can find a home. The number of landing marks has proliferated, finding ourselves not only operating within product development processes and marketing but as well moving closer and closer to business development and strategy. In the consulting world in particular, qualitative research has found footholds from which to lift itself up, closer and closer to the places where decisions are made client side. In essence, we have moved from being a vendor to an advisor.

However, with this popularization of our practice, working consultancy side I have noticed tensions which may potentially limit the wider application of ethnography in industry. The very same places where we have been able to seek refuge, which have come to appreciate and require our services, are now places where our role can become potentially limited by the very processes developed to make our integration client side more effective. With the best of intentions, our clients' goal to enable smooth translation of people based insights into their own internal processes unfortunately bring with them the very same issue

that we set out to tackle in the first place – lack of critical perspective. Victims of our own success, our establishment within corporate processes raises ever more challenges to our development, especially as we aim to have greater influence.

This paper aims to shed light on these tensions in ethnographic practice across the client-consultant divide. To do so, it will borrow a page from the visual arts – namely a method for drawing, an experiment in representation – negative space drawing – which in both its aim (to create a picture from a new perspective) and challenge (to shake off the preconceived notions that limit us) reflect a similar dynamic to our own in consulting clients. Representational drawing refers to negative space as that which is not the object of representation. By focusing on negative space, the draftsperson can disassociate from his bias of what he believes he is drawing: a cup, a bowl, an apple; and instead create a better likeness of the scene before him. In recognizing a negative space of understanding, I suggest we as practitioners can begin to move clients away from that which they believe to be the object of their research efforts: a finding, an insight, a need, which fit neatly into their agendas in order to craft a richer (but not necessarily complicated) picture from which to act upon.

LOOKING BEYOND DESIRE LINES

When we engage with clients, we enter into a relationship bound by the expectations of what qualitative research's role is in business contexts today. Similar to the draftsperson attempting to draw a still life, clients bring with them pre-formed ideas grounded in professional experience. For many, a major foothold, or desire line, lies in marketing divisions. This is perhaps the longest standing tradition, or the one with which people most readily associate the 'tool' of qualitative research. By virtue of this, we find ourselves both in a comfortable place, as well as a staid place - or at least a place in which corporate processes, and presuppositions about how ethnographic methods should be used and towards what ends are well worn, and as such, difficult to challenge.

Sunderland and Denny, examine a similar tension, acknowledging the tenuous co-existence of 'entrenched practices' of anthropologists and market researchers (Sunderland and Denny, 2007). Nafus and Anderson in their paper the The Real Problem: Rhetorics of Knowing in Corporate Ethnographic Research similarly problemitize the relationship between 'us' and 'them' in order to exorcise very literally 'the ghosts in the machine.' By extension, this paper aims to build upon their framework of 'the real' by seeing the context anew – through a negative space construct. As client and consultant, our 'he said ,she said' approach brings forth a different perspective on the conditions that frame our practice; not only exposing our reflective stance on ethnography in industry, but as well how our 'entanglements' (Sunderland and Denny, 2007) provide new instances of knowing that challenge our ability to see and theorize clearly.

In the shift towards broadening their perspective on qualitative data, marketing

divisions and the product groups they serve have had the task of fitting such potentially vivid and often messy input into the way they work and are evaluated. Dealing with internal stakeholders is of course a major consideration for our counterparts in corporations and is one that we empathize and work to address in our engagements.

But it is this vividness and messiness that I'd like to take a moment to consider. One of the main proponents of engaging in the ethnographic is that somehow it is seen as more real. (Nafus and Anderson 2005) By taking them to the jungle (not the zoo), we promise a dose of reality and rawness that with it brought the promise of radical insight and change. (this is particularly the case within innovation where the emphasis on significant growth makes ethnography and other less conventional methods not just acceptable but desirable). In leading these kind of ethnographic forays, however, it is easy to err on the side of the selling point at times, and lose our heads (and at times theory) in the moments of serving our clients - and particularly, their expectations. These are the conditions under which Nafus and Anderson so clearly point out in their critique of the real.

This is not to delegitimize the rationale for bringing the client to the field in the first place. Doing this ensures a clearer path for insights to make their way into the organization and hopefully back out again into the real world. This 'buy in' as it were, has become a critical aspect of delivering on our mandate while also creating a solid and sustainable practice within industry. When we bring non-researchers into the field, and by this I do not mean to open up the whole can of worms debate from 2006 on 'real ethnographers', but rather to state we cannot forget that these are professionals for whom there exist specific tools of the trade and world views, shaped by the organizations and divisions that they work within. Tools and views that if we are not careful, can occlude our own vision in advising our clients, rather than just serving them.

Because we can encounter clients/stakeholders with varying degrees of knowledge about the breadth of insight ethnographic applications can deliver, we on occasion find ourselves devising (and sometimes struggling in the process) ways which challenge our client's perspective through navigable channels. At once playing to their expectations of delivery formats (hard proof - video clips, quotes, photos) but then having to contend with what our proof may inadvertently set into motion.

In an effort to examine closely these tensions - between how industry aims to easily fit qualitative research into their processes (e.g. segments, testimonials, use cases) and what we fear may get lost in the process (e.g. insights and strategies) - we propose a negative space framework of knowledge. Moving along the trajectory of a particular case - a project commissioned by one author of this paper (client), and conducted by the other author (consultant) - we will discuss three types of negative space: 1) that which does not transpire, 2) that which cannot be captured and 3) that which is in between. Each of these negative spaces examines the relationship between client and consultant - their biases, contexts and collective aim to wrest only the very best out of the process.

DRAWING THE NEGATIVE SPACE OF KNOWLEDGE

In the fall of 2007, Orange/FT commissioned a body of research on European homes. This study sought to uncover a deep understanding of practices in the home that could be used to inform new product development

Negative Space: That Which Does Not Transpire

As with most projects, the study was initiated through an RFP. Herein our first encounter of negative space arises. No doubt, the focus provided by a lens is vital, but we don't want to occlude our vision from interesting things that occur on the sidelines. The RFP introduces a scope to restrict subsequent shifts once work has started. Unfortunately, as we shall see, without sufficient care it can also have the unintended consequence of over constraining the work by preventing the discovery of new insights. It determines what is considered interesting and may act to occlude potentially important events.

For ReD the arrival of the RFP brings numerous challenges. Firstly, understanding what the client's specific research goals are and how they fit into the wider picture of the client's organization. We see this as re-scoping based on our view of what the client can't see themselves – the outside perspective. From the client side, however, they are very wary of this, perceiving consultancy's re-scoping of a project as potentially opportunistic, suiting themselves, but not the customer. For instance, moving scope onto an area they already know more about, but is of less interest to the client. Or changing the goal-posts so they have to do less work now, or so that they get the chance of doing more (lucrative) work later. Herein lies one of the more fundamental tensions between client and consultant.

Second, there is the task to not only address these objectives, but create a research approach that provides a fresh approach, a distinguishing factor that makes it stand out from competing proposals. This involves giving a flavour for what the research will reveal. Again, the challenge here is to draw attention without over-promising or building too detailed a picture because this may serve to consolidate early expectations of what areas are most important. ReD in this case, crafted a vision for the client which outlined household activities which it felt would cast new light on Orange's understanding of household needs. The proposal was organized around the family meal, a chore chart, and a night in; attempts to probe on how households may or may not engage in such activities and in turn point to potentially new ways to understand the home.

Yet it was this very proposal, or staging of ethnographic activities, which created expectations and stress on the part of the research team to ensure that these activities transpire. These issues of occlusion gain greater prominence as the process develops, peaking at various touchpoints of understanding between client and consultant - In the

move from preliminary staging of research into the fieldwork itself. Fieldwork is one of the first touchpoints, presenting the first testing as it were of our commitment to the RFP, and the items outlined. To refer to it as a checklist may seem to overstate the role of the RFP, but we cannot underestimate its contractual nature. Segmentation in particular is one component of commercial ethnography where adherence to this checklist is readily found as segments institutionalized role within industry make this the case.

In the Orange case, the internal client was most interested in specific segments that constituted different types of families - those with young children and those with teens. Looking across life stages provided a structure for how family needs change over the course of their children's development. Beyond this frame, additional criteria were added to give further breadth and depth to the study. An urban, suburban dimension was added, and as well, an interview condition which required entire households to be present - if not for the duration of the interview - at least for some significant period of time.

With interviews lasting upwards of 5 hours at a time, combined with the aforementioned criteria, recruiting study participants proved challenging, which resulted in anxieties on both sides of the client consultant divide. As clients require research to be used immediately and effectively towards practical ends, their goal is to be able to add qualitative findings to the pre-existing corpus of data. Hence, when bumps arise, they present risks to this engine and can place the consultant in an uncomfortable position of having failed. Here is where we want to step back and ask ourselves whether or not failing to recruit families that met segment criteria and interview demands over the course of a one-week window should be necessarily viewed as such. In fact, we propose the opposite. From both perspectives, client and consultant, these real world bumps expose the realities of how families live today. In such metropolises as London and Paris, where the study took place, family structure and practices hardly match the idealized versions cast in the segments, and as well in the scenarios the consultancy used to illustrate how interviews would transpire.

While both parties were able to acknowledge this matter as a finding, there was still the very real concern that client-side stakeholders would perceive this as a failure to deliver. Experienced ethnographers understand that fieldwork does not mark the beginning or the end of data collection. Data arises from the friction between the research framework and the world, which it aims to study and understand, whether or not it occurs in the time-boxed activity of field research or in the stages before and after actual household visits. But regardless of the client's own ability to recognize segments as approximations, caricatures, even, it is their broader audience within the organization, especially those far from the actual research engagement, who forget that they are idealized descriptions rather than real people. Hence when things don't go according to plan, client and consultant alike must ask themselves why. By using a negative space framework, understanding why it is things did not transpire. And more importantly, why is it that for some it is so critical that it had. A lesson for all involved to negotiate their role in seeding knowledge across the value chain.

Negative Space: That Which Can(not) Be Captured

The struggle with the political economy of commercial ethnography is not the only hurdle our case highlights. Issues of negative space also occur with the very people whom we study. As market research has become commonplace, people willing to participate in studies bring with them assumptions about why they are being studied and in some cases how they should act. In our study of families, this self-consciousness of the participant was unavoidable. The majority of households visited exhibited in one form or other reaction to a perceived pressure to perform to standards of family life. This ranged from participant statements like: 'We're just a normal family." and "We enjoy time spent like a family, together, watching a movie and stuff like that."

As much research has indicated previously, this can be used advantageously. Pink states how differences between actual practices in the home and people's aspirations in the domestic realm highlight deep needs that aren't so readily reflected upon, or articulated. However, while we are equipped to can cut through this white noise (Goffman, 1959), our non-researcher counterparts run the risk of falling prey to taking these performances at face value. This is even more so the case given documentation and reporting standards which rely so heavily on statements made by respondents. In a recent RFP from another client, the request for 'at least 30 1 minute video clips' as part of their deliverable underscores the weight user statements carry in industry today. On the one hand, this can be viewed as a marker of our success in bringing the voice of the consumer to the fore. On the other, it raises questions of the ability to convey findings in this way, as talking heads, divorced from any context, let alone their own.

It can be said that video clips work within the realm of positive space. When relying on video clips as proof of respondents' needs, a singular picture emerges, one that is certainly legitimate, but when stripped of its wider context, can be a dangerous tool. In our study, there were a number of clips documenting family archiving activities, as it was an area of extreme interest for the client. A long and complex practice, which brings with it all manner of considerations: there is the identity creation of the family, the simultaneous struggle to keep abreast of capture and display technologies, and the ongoing debate in households between digital and analog versions of the family album. Hardly a dangerous tool in this circumstance, and certainly square with Orange's business interests, but in ReD's mind, a distraction, a MacGuffin even, diverting attention from where the real action is at.

Negative Space: That Which Is In Between

As the team moved into the analysis phase, it became clear that what we were looking at was far deeper than family album management. What researchers felt palpably in the field was a general sense of absence in the home. Certainly there was the absence of family members that we examined earlier, but the absence sensed by the ReD researchers was of a higher order – similarly encountered as Pink describes in her examination of multi-sensory ethnographic encounters (Pink 2004). For the ReD researchers, the absence sensed in

Orange households was there, but not easily captured/documented.

One researcher attempted to capture this absence through the documentation of a family meal. In one of the suburban households outside London, the researcher chose to document the preparation of the family meal on the night of her visit. In the scene, the camera is trained on a bowl of mash potatoes being made, rather than the respondent herself. Footage then reveals the meal, completed; sausages on the stove and the mash ready in a bowl. However, what is not captured is that the meal was never eaten. This happened off camera, the result of a series of micro decisions that occurred in the household, too subtle and too fast to have been able to capture successfully on camera, and yet one of the most critical takeaways from the research.

This combined with observations in other households allowed the research team to craft a deft account of how absence and its flip-side, presence, come together to form the major axes of family struggles. Presence, best reflected when all household members are together in the home brings the reassurance that the family unit is functioning properly. Yet we know households don't operate this way. Not only was achieving presence amongst family members difficult, but more importantly for Orange, presence appeared to be challenged by telecommunications, rather than supported. While the Internet and telephony create numerous channels for connection, they don't necessitate creating those channels amongst family members. In fact, it was quite the opposite.

This threat to presence illuminated three key insights for Orange: safety, providing breathing room, and fostering family togetherness. We do not have time to go into all three insights in detail in this paper, but will focus on the safety and breathing room insights in order to make clear how negative space in this context – the ability to see in between, to resist the temptation to focus on the positive space of knowledge – allows client and consultant alike to gain new ground.

Safety in Numbers

The coming and going of family members was an everyday reality. And one that was complicated not only in the challenge to overcome logistical matters of scheduling, getting dinner on the table, and organizing school runs and so on, but as well by the psychological burden of knowing one's child is safe from physical and emotional harm. This household was comprised of 4 tween/teenagers ranging from 12 to 17 in age. The mother's constant monitoring of her children's whereabouts revealed her concerns about unknown forces that could affect their lives. Conversely, she viewed recreational drug use and other typical teen problems quite ambivalently as part of the learning curve of life.

To counter this, technology played a role in the mother's ability to keep tabs and also exercise parental agency when needed. With the home phone blocked from making out going calls to mobile phones, the only phone in the house capable of making these calls were

Drawing from Negative Space

the household members' mobile phones. Considering, however, how teen use of mobile phones is dictated by a parallel economy to that of the parents in the household (i.e. top up, pay as you go plans, and the hoarding of minutes) parents' mobile phones became the default home phone from which the majority of calls were placed.

Initially viewed as yet another boundary her children had breached, the mother's view quickly changed when she realized how to use her phone's call log as an alternate means to keep tabs on the children. Recognizing that calls were often the precursor to getting together physically, the log could be used for one of two things: 1) to indirectly keep tabs on the children's whereabouts or 2) under more dramatic circumstances be used to call children home immediately by calling the friend's mobile phone. While the latter was done sparingly, it did give the parent an unlikely sense of control, not less because of the ability to be in contact with her child's friend at the touch of a button, but more importantly holding the child in a contract of 'you don't want to be embarrassed by your mom calling your friend's mobile, thus you will be home for dinner on time.' In this case, both the direct and the indirect means of locating children afforded both parent and child a sense of presence and breathing room in a household otherwise complicated by interests which continue to draw them out of the home.

Breathing Room

A similar kind of breathing room proved critical in a number of other households studied. In the majority of homes, technology was perceived not surprisingly as a double-edged sword by parents. While understood as a must have in the home, technology and in particular the Internet brought with it all manner of challenges to the family. Examples abound in the research of the dynamics of parenting being changed and reset by the rapidly growing presence of technology in the home. Toddlers are now making purchases on eBay. Teenagers amass 500 friends on Facebook. Paradoxically, these examples were at once a source of pride as well as concern for parents, highlighting their struggle to grasp the future consequences of such forces in their home.

This tension in the study underscores parent's ambivalence towards technology's presence in the home. On the one hand it is a necessity, the key to ensuring one's child's future; a standard amongst modern families, a normative act of parenting. On the other hand it threatens to take children away from the center of family life. Not only are there unknown fears, previously limited to the outside world, but fears amplified by the web's ability to render the home more porous. "We don't talk to strange penguins now do we Zach." But simultaneously concerns about how to ensure that kids have the freedom to experience their own online worlds unfettered by the constant surveillance of parents. A kind of acceptance that the digital world is here to stay no matter what we do.

Rendering Negative Space Positive

For Orange, realizing a deep need to resolve these issues of presence and absence in the

home, either through directly addressing issues of child safety or indirectly creating space for teens to develop their sense of independence, was not exactly what they had expected to uncover. While the client worked closely with the ReD team from planning the fieldwork and up through analysis and reporting, and understood intimately how key these needs in fact were, the internal clients (hailing from a product development context) were focused on fitting insights to current development projects. Because of this, they struggled at first to move beyond their current scope – asking for take-aways which they could relate to supporting logistical activities in the home in the near term.

It was not until we were able to make the opportunity we saw for them in this space tangible, that we were able to get them to see the significance of the insight. In essence, we had to render the negative space positive, bringing to a close how the framework can be applied, and under what circumstances.

CONCLUSION: RESETTING THE SCOPE

What we take at face value in an effort to meet and support seamless work processes may be something that professional standards dictate, but that we must remain critical of in our work as ethnographers in industry. In this paper we have endeavored to show, by way of a framework of seeing – the negative space that exists but is often overlooked in favor of the low hanging fruit. While client and consultant may struggle at times to resolve respective biases and agendas, what we have at least pointed to in the Orange-Red case are the opportunities that arise when care is taken not to let the process dominate the content.

The negative space framework we sketch out is still clearly that, a sketch of one case, but a sketch, which we feel could certainly apply to numerous other cases. By challenging what it is that we are actually looking at in the first place: ourselves and our own practice as shaped by the respective organizations we work within; the subject and why it appears at times not to even exist (that which does not transpire); the voice of the customer which keeps reappearing in uncanny ways (that which can(not) be captured) ; and the thing that simply won't go away, but has no obvious form to prove itself (that which is in-between); we allow ourselves a shift of focus, and the ability to reset our scope for greater impact.

REFERENCES

Goffman, Erving
1959   *The Presentation of Self in Everyday Life.* New York: Anchor.

Nafus, Dawn and Anderson, Ken
2006   The Real Problem: Rhetorics of Knowing in Corporate Ethnographic Research.
        Ethnographic Praxis in Industry Conference Proceedings.

Pink, Sarah
2004   *Home Truths*. London: Berg.

Sunderland, Patricia and Denny, Rita
2007   *Doing Anthropology in Consumer Research*. Walnut Creek: Left Coast Press.

Putting Mobility on the Map: Researching Journeys and the Research Journey

SIMON ROBERTS
Digital Health Group, Intel Corporation

This paper, based on a fieldwork conducted with community transport projects in rural Ireland, examines the place of mobility in the lives of older people. It uses the idea of journey to explore what mobility means to older people, what the research made visible to a diverse range of project stakeholders and to reflect on the nature of ethnographic projects in industry settings. For passengers, the journeying is often as important as the destination – travelling creates visibility of countryside, community and communion with others. For project stakeholders, the research encouraged a view of mobility that transcends travel because it highlighted the world beyond the bus. For researchers, the project created challenges to the dominant view of technology for ageing-in-place within their own organization. Finally, reflections are made on industry ethnography as a journey with often unknown destinations.

> If you came this way,
> Taking the route you would be likely to take
> From the place you would be likely to come from,
> If you came this way…you would find…
>
> Little Gidding, No. 4 of 'Four Quartets' - T.S. Eliot

INTRODUCTION

There is a saying in Ireland, which suggests that if you are lost, it is probably because you started out in the wrong place. This paper flips this commonplace around. It suggests that, as industry ethnographers, we typically know where are starting from, or at least know where we need to begin. However, our destinations are rarely as visible at the start of our research journeys. We depart on research projects without knowing exactly where we are going. Our training, and understanding of our role, allows us to be quite comfortable with this. For those elsewhere in our organizations this idea can be more challenging. This paper reflects on this situational reality as experienced through one project. The project in question was one designed to explore the journeys of older people in rural Ireland and to assess, qualitatively, the impact of transportation and mobility services on their quality of life. So at one level the paper explores what journeying means to community dwelling older people in rural Ireland. At another, it examines what the research journey uncovered or made visible to a diverse range of stakeholders involved in the project – researchers and their colleagues within multi-disciplinary teams, the rural transport programme administrators, and the community transportation providers themselves. Finally, in thinking about such

ethnographic research as journeys it explores what might be learned about conducting open ended projects within industry settings.

Therefore, in a literal sense this paper is about journeys and argues that the role these play in the lives of older people is crucial for those concerned with enabling independent living. As such it forms a contribution to a growing body of work that links access to forms of transportation, and mobility in general, with enhanced quality of life as we age. In a more figurative sense, using the metaphor of journeying the paper argues that ethnographic research in industry settings needs to be framed less as a tool for providing an answer to an existing question but as attempts to create pathways of understanding or clearings.

If one finding of our research was that for older people it is often as much about the journey as the destination, the same is true of the ethnographic venture within a corporate setting. Trips in buses and large ethnographic research projects have impacts and justifications that extend far beyond their primary, or stated objectives. Learning how to account for the journeys we take as ethnographers is an important skill to develop. Equally, our research allowed us to give project stakeholders a different view of journeying in late life which has changed the ways they account for, and justify, what they do.

OUR STARTING POINT: THE RESEARCH CONTEXTS

If, as the Irish saying suggests, it is important to know where you starting from, it is necessary to outline three key starting points for the research team. These were our own organization, Intel Corporation's Digital Health Group. Second, the Irish context and thirdly, the body of clinical, psychological and sociological literature relating to mobility, transportation and ageing.

The Intel team, members of the Product Research and Incubation division of Digital Health, is tasked with conducting path finding research which identifies opportunities for technological platforms that can support independent living for older people. Working in multi-disciplinary teams, we use ethnographically inspired understandings of late life to develop independent living solutions. The team is situated in Ireland, and is charged with bringing an European perspective to bear on the business group's activities.

By European standards, Ireland is not an especially aged society. In fact it is a young country, with 11 per cent of the population over sixty five years old (CSO). This youthfulness has also been emphasized in commentaries on the Celtic Tiger – the story of Ireland's two decades of economic growth (cf. Foster 2007). However, the population is forecast to age considerably over the coming decade. Ireland's older population tends to be more rurally situated at a time when the fabric of the countryside is changing. Older people report the countryside 'emptying out' during the day and voice concern about the lack of support they receive from the younger generation. As one woman commented on a bus in

rural County Kilkenny: 'In my time, we looked after the sons and daughters and mothers and fathers. That's the change…The younger women are all out working.'

In tandem with these population shifts, rural infrastructures are changing. The closure of public houses and Post Offices have become, to rural dwelling older people, a negative index of social change and modernization. As these 'basic' facilities become more diluted, and healthcare is restructured around larger, 'super' hospitals, the importance of transportation and mobility is heightened. With car ownership rates in Ireland increasing faster than any other country in Europe, with the exception of Greece (National Spatial Strategy 2002), there is a sense that Ireland is a highly mobile country. However, for those older people with no car or driving license (often older female women), mobility is a highly relative concept and they feel less mobile than ever.

Given the importance of transportation to older people, the issue has surprisingly low levels of visibility in public policy debates. Further, little accurate data exist about older Irish people's travel patterns (NCAOP 2006). Census material creates a blind spot since it questions people on their mobility patterns relating to work, college or school – effectively discounting the idea that older people may have travel patterns and needs to be understood and planned for. In this context it is unsurprising that little qualitative understanding of older people's transportation needs, practices and impacts exists.

As recently as 2006, a senior Irish geriatrician argued that 'the importance of transportation to health and social inclusion has been under recognized in both the medical and the gerontological literature' (O'Neill 2006). However, the complex relationship between health, sociality, independence and mobility are key themes in literature on older people. In terms of health impacts, commentators point to the demonstrable links between access to transportation and healthcare – lack of available transport has been found to be a significant barrier to utilizing healthcare (Rittner and Kierk 2005) and these effect are exacerbated in rural areas. Beyond explicit health care location (clinics and hospitals), lack of transportation has negative impacts on health outcomes for older people since the maintenance of close relationships, and engaging in meaningful activity outside of the home, are recognized as an integral aspect of successful ageing. Mobility allows people to maintain and strengthen their social networks, and studies have shown that perceived social support to be the strongest predictor of physical and psychological wellbeing (Auslander and Litwin 1991).

Transportation and mobility plays a key role in enabling individuals to remain in the environments of their choice as they age and is integral in giving them a sense of self worth and agency. As Holland *et. al.* (2005: 49) argue:

> '…[T]he capacity to make and execute choices in moving around within
> *and* outside the home is crucial, and not simply to accomplish the
> necessary and desirable activities of daily living. It is essential to a
> person's sense of who they are and how they are situated in their

material and social worlds, and, as a consequence, to their quality of
life' (Emphasis mine).

Prior to beginning fieldwork we had developed a sense of where we were starting out
from. However, we still did not know our exact destination. We had objectives but not a
precise set of outcomes in mind. This concerned some members of our organization who
questioned the link between technologically enabled independent living and minibus services
in rural Ireland. Our hunch was that there would be 'something there' in the research but
this was difficult to articulate. How do you describe, and harder still, justify a journey when
you don't know where you going and why?

We consequently tried framing the project in three ways. In one narrative of
justification, we spoke about the explicit links between healthcare access and transportation.
Simply put, mobility is a functional requirement of a visit to a hospital or doctor. Our second
narrative strategy linked our work to a significant body of work conducted by US colleagues
at Intel[1] which had examined aspects of social health and ageing. In this sense we spoke to
the implicit links between mobility and social health that our work might uncover, since it
would focus on sociality outside of the home. Finally, perhaps appealing to a sense of artistic
license as member of the social science research team, we argued simply that our research
would fill a significant lacuna in understandings of ageing in the European, and specifically
Irish, context.

As we made the case internally for the research, we discussed a research collaboration
with the Rural Transport Programme (RTP). The government funded programme has
overseen the development of 34 local projects, throughout the country, providing transport
services for rural areas. The overall aim of the RTP has been 'to encourage innovative
community-based initiatives to provide transport services in rural areas, with a view to
addressing the issue of social exclusion in rural Ireland, which is caused by lack of access to
transport'. This has led to the introduction of a range of semi-scheduled and demand-
responsive services. In 2005, RTP services delivered more than 650,000 passenger journeys
on 75,000 service trips, which provided transport for an estimated 25,000-35,000 users.
Although all services are available to the general public, older people benefit greatly. Internal
RTP figures show that 60-70% of all users are over the age of 66.

We agreed on a collaboration with the Rural Transportation Programme which gave the
researchers access to five transport projects across Ireland. These projects were chosen
based on their size, scale of operations and operating environment, use of technology and, of
course, willingness to support the researchers. The collaboration created the challenge to
explore elements of transportation that would have otherwise remained obscured. It linked
us to academics and policy makers who helped shape the research design. In the process of
acquiring stakeholders we took on obligations and the burden of expectation since the
research design was fundamentally co-creative. Collaboration gave the researchers multiple

---

[1] In particular Intel's Proactive Health Group, progenitor of the Digital Health Group at Intel.

audiences: an internal one – colleagues within the division and external ones - administrators at the RTP, external advisors and the projects. The research began under the broad rubric of a qualitative examination of the impacts of transportation services on the lives of older people. Three fieldworkers set out to ride buses and to journey with older people in rural Ireland.

ON THE ROAD

When we leave the bus depot just after 9am, John the driver remarks that we are running late but that he knows the route well. It is a bright morning and soon we've cleared the town and are making our way up towards the first passenger's house. As we turn off the main road, we see a signpost that says our destination is 2km. John points out how approximate this is – 'It's more than that!' His local knowledge of this narrow road turns out to be more precise. It is another ten minutes or so before we make the first pick-up of the day.

Figure 1. On the road from Navan to Kingscourt.

He knows the passengers well – the first is 'very bad on her legs' he says, 'she used to be confined to her house and she only started getting out recently…she really looks forward to it'. The passenger is waiting on a chair outside the house with her son, who lives in the cottage next door. The second passenger is not joining the run today so we head straight to the third passenger. John says we're going to be early and we turn out to be 15 minutes

ahead of schedule. Initially, Kathleen is nowhere to be seen but when she boards the bus, she seems mortified that he had to ring on the door bell. It matters little to John, he reassures her. The first thing he asks her is how she is today: 'How's the hip?'

As the passengers join the bus, the tempo and volume of conservations starts to increase. Conversation waxes and wanes, drifting across a broad canvas of subjects: the health of fellow passengers and others known to them – 'he's home and making a good comeback'; architectural tastes and the emergence of new houses – 'they must be terrible to heat [two storey houses]'; and voices of concern and solidarity: 'it's funny that you don't have a wheelchair, Nancy'.

Anon we pick up further passengers, all female. We pass one house where we don't stop, informed by a passenger that the owner has been in hospital. The next 'no-show' occasions more dissection of motive or cause. Absence occasions, to a degree, more conversation, than presence. There are usually ten passengers on this service, but with post operative recovery, illness and unexplained absences there are only five today. When the bus arrives at the old school hall in Kingscourt, the organizer of the group comments that 'We're a small family today'. Tea and biscuits are brought out. John joins the women for tea but also checks on the smell coming out of the kitchen. He is to take out a meal for people in the local area presently, leaving his passengers to have lunch themselves, to play some bingo and talk amongst themselves.

Figure 2. On the bus

COMING INTO VIEW

One journey from one project. Over the course of six weeks the team participated in many such journeys across Ireland. In the course of their travels they journeyed to a wide variety of destinations - day care centres, shopping centres, hospitals – and experienced for themselves the act of journeying across rural and remote landscapes with older people. For the passengers these services are, of course, about going somewhere, travelling to a place to do something. However, it was also apparent that the act of journeying was important in its own right and a significant aspect of journeying can be seen in terms of what is rendered visible.

Leaving the house creates visibility – it makes the community, composed of older and often long time residents of an area – apprehensible. Simply put, the act of stepping out of one's home to get on to a warm bus to be surrounded with familiar faces, makes apparent and reinforces the sense that one is part of a community. You see them and they see you. There is a palpable sense of expectation on the part of passengers as a bus draws up to a house, as they wait to see the person leave their house for the journey. The curious, but deeply concerned conversations that are occasioned by the absence of regular passengers, their invisibility, suggests that one aspect of being a community for these passengers is about seeing each other, face to face. Absence creates concern and intrigue. Presence, and absence, are crucial indicators to passengers of the health and wellbeing of their fellow journeyers. Co-presence for the passengers is a necessity to be 'in communion' with neighbors with whom face to face contact is often sporadic – to be part of a 'knowable community' (Williams 1975)[2]. The alternative is unwelcome isolation:

> 'It's nice to have someone to talk to - put on the radio? The radio isn't somebody to say hello to you. I like somebody who's able to say hello to me and chat to me. I'm exhausted up there. No-one to talk to, day in, day out. Only for the likes of these [active retirement] clubs I'd have gone cuckoo.'

For those present on the buses, a heightened sense of togetherness, of bonds that transcend normative social status, a form of *communitas* (Turner 1969), was apparent both in the sense of concern for others that was demonstrated but also in the quality and quantity of conversation (and sometimes song) that journeying entails. Much of that conversation, when not about fellow passengers (or non travelers) concerned the landscape passing by through the windows. Journeying make visible for passengers their local, redolent, landscape – 'places with remembered histories' (Saris 1996). The landscape gives up tangible clues or hints of change – for example, the new house that signals a marriage and provides cues for commentaries on shifts in taste in modern Ireland – and starting points for conversation that

---

[2] This acts as a salutary reminder that communication, and its corollary, community, cannot always be mediated – that 'networked sociality' might not be the (only) only means to address isolation and independent living.

Putting Mobility on the Map

is about, and acts to create the local community. Passengers were quick to point out that such a view of their local world is not available out of their kitchen window.

Bus journeys simultaneously reveal and construct community life for passengers. Journeying makes tangible the links between the landscape, community, locality and sociality. The bus is a location where these things come into alignment. The consequent conversation and reverie reveals not only the nature of place and sociality in such specific rural contexts but the importance of understanding that transport is about more than displacement. Mobility services offer a means of escaping the home –they create joy, independence, access to healthcare and sociable lives. They enable a 'structure of feeling' (Williams *op cit*) which is integral to the positive experience of ageing in Ireland.

OFF ROAD RESEARCH

Off the roads of rural Ireland, the research team journeyed into the 'back office' of the transport projects. Here, the management and modus operandi of the projects were made visible and it was possible to map the routes that we were experiencing against the transportation models that these modes of organizing services produced. One objective of our research was to make visible to the projects the models of service delivery in operation. This required us to objectify the improvisations that had created their way of running bus services.

The five transport projects are all operating in different circumstances with respect to their funding, the size and nature of their geographical region, their use of technology and their understanding of the needs of the local community. The services they provide are responses to these variables and continue to evolve as they respond to the contingencies and needs of those they serve. Many of the projects described their operational model as one of laying down transport onto existing community activities and networks. For example, a service is created to cater for a day care centre, active ageing group, or to facilitate a special shopping trip.

Our reports of the journeys had other outcomes. Our use of GPS (Global Positioning Satellite) tracking devices in the buses, in tandem with Google Earth, allowed us to create maps of the routes which were powerful visualizations of their operations. The maps portrayed the routes of their buses and made it possible for them to visually comprehend the scale of their operations. They became at one level stunning illustrations of the remoteness of their passengers, and at another powerful visual representations of the way these remote locations were linked to local important destinations by the buses. The lines of the maps, their bus journeys, become the stitching of community for older people. In this sense they are the 'Songlines' of ageing in Ireland – representations of landscape, topographic maps of journeying and a 'socio-scape' of a geographically bounded community (cf Chatwin).
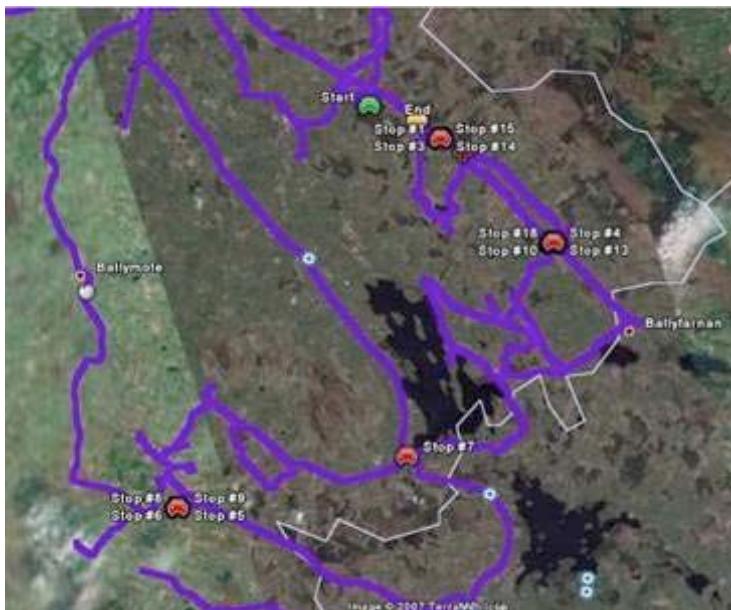
Figure 3. A GPS tracker reveals a day's journey on a bus in rural County Sligo.

The accounts of journeys, which we layered on top of these graphical representations, included stories collected from the hospital, the doctor's surgery, meals on wheels services, day care centres, post offices, shops and active retirement groups. This combination made visible to the projects their centrality at the heart of a very diverse set of providers and their role as integrators across the social, economic, cultural and care landscapes of their region.

For small rural projects, surviving on small grants and their own wit, entrepreneurialism and hard work, the idea of hosting a team of ethnographers from a large micro-processor company was undoubtedly somewhat baffling. They were quick to ask for feedback when we returned from journeys. The research journey for these projects was one in which they started to understand what 'ethnographers' do. More importantly, it revealed insights into their operations. Our interest in them, and our determination to look beyond the realities of bus scheduling, piqued their interest in what they were *really* doing and how it impacted people. Our own reframing of the research – our justification for doing it – began to evolve with their own evolving view of their activity. We both began to think less about the running of bus services and more about their role as engines of independent living.

A similar transformation, enabled by a shift in what was made visible through the research, also occurred for the Rural Transport Programme administrators[3] . The principle outcome for them has been an ability to use the research to transcend the strictures of the normative 'performance assessment frameworks' and 'value for money' narrative in which they work. The research has given them a new way of talking about what they do, a different sort of argument about the value of the services they oversee. They report an ability to talk in a new way about the benefits and impacts of the work of the thirty two projects they fund. They are able to cast a different sort of argument about their impacts which moves beyond plain passengers numbers to include ideas about mobility and quality of life in late life. In this way, their engagements with government administrators have benefited by allowing them to 'compete on a different axis' that speaks to a broader range of outcomes than the numbers of journeys made, passengers transported and miles travelled. The research, which 'held a mirror up to ourselves' made visible the value of journeys for older people as social events, as a means of overcoming functional dependence and as a means of masking their reliance on others to remain independent.

THE RESEARCH JOURNEY FOR THE RESEARCHERS

For the research team the journeys on the buses enabled a new perspective on ageing and fresh challenges, from our location within a technology company, in how to translate this into independent living technologies. Within the context of the research project as a long journey whose destination slowly came into view, a series of slowly unfolding realizations forced us to reframe the work internally. As a destination became visible, so we were able to tell the story of where it was our journeying had taken us.

The act of journeying allowed us to see that these buses are as much events as they are functional 'facilities'. They are social events and, as often as not, people are on the bus to be on the bus, not merely to travel to a given destination. This revelation confronted one of our own framings of the research which posited the importance of transportation and mobility in a functional sense, enabling access to healthcare. Whilst we found significant evidence that many bus journeys were used by passengers to travel to health related locations, we realized that whatever its importance this was not the only reason to travel. For ageing passengers travel has its own intrinsic benefits.

This runs somewhat counter to much of the literature on transportation and older people (e.g., Mollenkopf *et al.* 2004; Banister and Bowling 2004), which tends to relegates the journey to a function that enables something else, reducing it to the act of moving a person from their home to another location so that they can perform some other, higher order task. As such, the reason why people travel becomes the focus of accounts of mobility in later life. This has the dual effect of distracting attention from the journey itself and prioritizing the functional or pragmatic aspect of the trip. This rhetorical shift in our attention can have an

---

[3] This section is based on a discussion with an RTP administrator (June 2008).

unfortunate outcome, particularly in respect of ICTs – it suggests that if the thing that people are travelling for can be delivered 'down the wire' or otherwise transacted online, the need to travel can be negated. Our research, since it made the poetics of journeying so visible and brought focus to the journeys themselves, provides a strong corrective to this perspective.

At the outset, another of our narratives of justification had been the links between journeying and sociality. Given our findings, and our organization's longstanding interest in sociality and ageing, this was not an inappropriate framing of our work. However, the degree to which the journey itself would emerge as a social event was unexpected. So too was the narrative construction by older people of home as a virtual prison. What had emerged was the notion that the home in rural Ireland as one ages might not be the centre of one's social existence, or rather that the most valorized form of social contact is that which takes place outside the home. Furthermore, when we reflected on the destinations we had experienced – shopping or day care centres, pubs, post offices, active retirement groups and hospitals – it become clear that our journeys had made visible a seam of service providers, contexts and locations on which rural dwelling older people depend for basic necessities, healthcare *and* a social life. As our research journey progressed we made these services, and their singular importance for successful ageing place more visible in our framing of the research.

What had begun as research into transportation services for older people had morphed into a project that made visible a multiplicity of agencies and players operating simultaneously in the interests of older people's health and welfare. Our journey had started by being focused on buses and ended being about ecosystems of support for older people. That was not a destination that had been anticipated at the outset. However, it has been a significant one for us as researchers of the ageing experience situated within a technology company. The significance lies in the fact that it forces us to imagine a much larger cast of stakeholders than previously envisaged into the frame of our design and business strategy.
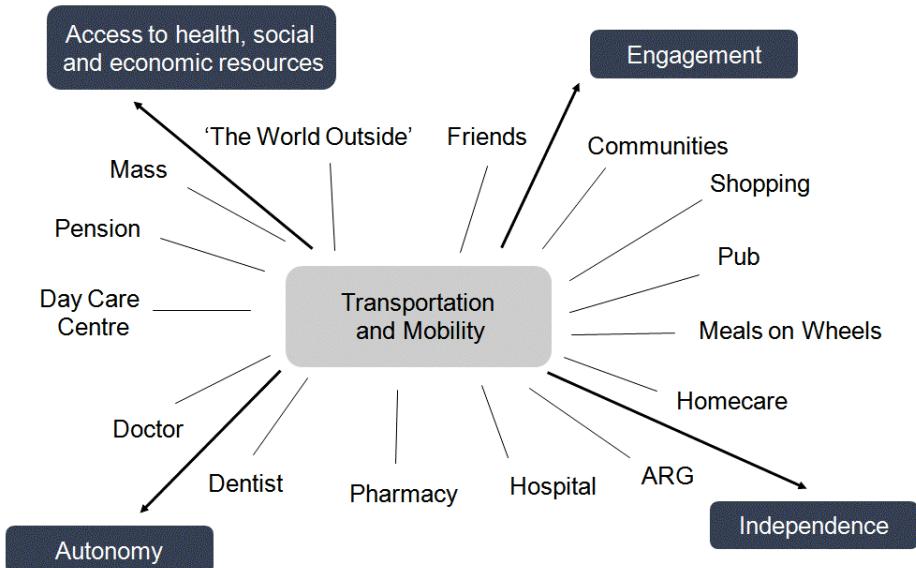
Figure 4: Transportation and mobility at the heart of independent living for older people.

Our journeying created a powerful realization. Older people want to look beyond the home. Realizing that forced us in our thinking about the 'implications for design' from this project to look beyond the home too. Given that a clear objective of Western policy associated with ageing, health and care systems is to enable an independence within the context of the home environment (Wiles 2005: 79) this presents productive challenges, as well as opportunities. In the context of the discourse of technologically enabled independent living, where the automated, sensed or otherwise augmented environment of the home is constructed as the fundamental enabler of such late life independence (cf. Hammel 2004) our work produced significant challenges for us as story-tellers and designers of outcomes that might fit our organization's dominant view of our remit or scope.

Our research demonstrated the importance of life beyond the home. It was not negating the importance of homes as sources of material and ontological security nor, as objective places and subjective states (Lefebvre 1994[1974]). Nor was it ignoring the considerable evidence that homes have heightened importance in late life (Tinker 1994). However, our experience illustrated the importance for older people of transcending the home to participate in a social life beyond the home.

The image of prison and entrapments reoccurred throughout research and the bus journeys emerged as key practical resources for enabling escape: 'All my old neighbours are gone and the younger people have all gone to work. I don't see many people and in the daytime I am home by myself…I'd be lost…stuck in the house…I wouldn't get out'. The bus services come to represent instances of autonomy in a context where 'the freedom to make – and continue to make – choices is perhaps the greatest single index of well-being (Kirkwood, cited in Kellett *et al.* 2005:291). We concluded that the bus services support independence for older people because they address necessities while making them appear as choices.

Our journeys forced us to critically revaluate the idea, and reality, of home for older people and, as such, allowed us to articulate a different vision of independent living and our potential role in enabling that. That idea of independent living is one in which a social life, and access to services, outside of the home is the *sine qua non* of independence for older people since it frees them from dependence and creates a strong sense of autonomy. In this sense the home is no longer the sole unit of analysis when understanding ageing and it might not be useful to think of the home as focus of our innovation efforts. A well illustrated story about the importance of infrastructures and sociality beyond the home for older people produced a fresh narrative about independent living that supplemented the existing organizational narratives of technology enabled ageing-in-place.

JOURNEY'S END

> And the end of all our exploring
> Will be to arrive where we started
>
> Little Gidding, No. 4 of 'Four Quartets' - T.S. Eliot

Most ethnographic research projects, like journeys, have clearly identifiable stages: identifying contexts and setting objectives, the research itself, analysis and dissemination of findings. Laid out in this manner research appears orderly and sequential. In reality the progression is more disorderly than that - the journey more twisting, emergent and contingent. Different stakeholders in the research learn different things about a research project at each stage and this alters the course of the journey. The meanings of the research process start to unfold long before the research findings become apparent. In the same way that for passengers it is the journey as much as the destination that is important, so with ethnographic research. The value that it creates is located not just in the findings – the finale of the debrief – but in that journey and what it makes visible for those travelling. Research is, to this extent, as much about the process, the journey, as it is about the destination.

The journey that this paper has narrated involved many passengers – the ethnographers and their colleagues, community transport providers, administrators and policy makers. At the heart of the journey, and this account of it, has been older people using the bus services.

For them, the journey, not just the destination, is a hugely significant component of travelling because of what it makes visible to them - their community, local environment and kinship networks. For other stakeholders the journey was a longer one which stretched from their early involvement in framing the project, and contributing to its terms of reference, to helping the ethnographers onto the bus services. A presentation, held some weeks after the field research had been completed, created some degree of finality to their journey, but many original stakeholders have heard a reprise of the findings at other gatherings and events in Ireland subsequent to this. The transport companies used our findings in their annual reports and continue to draw on them in their dealings with the RTP and other agencies.

As the journey unfolds over time so the telling of the story about it changes. One key feature of such research journeys is that they involve continuous narration, repeated re-tellings of the story which are inflected by who is listening, and where one is on the journey. Ethnographers in industry settings need to manage a tension between the freedom to explore new territory, to go to new places and to be clear about their objectives, their destinations, at the outset. As this paper has revealed, the research team was unable to immediately produce a narrative which explained what their research destination might be. But with repeated re-telling, and attention to what response their story received, they were able to explain the research in a way that made better organizational sense. They learned what to highlight, to make visible, in a way that would create support and enthusiasm for their work.

However, if this narrative imperative is met through words of justification, it is more effectively satisfied through a commitment to making the research speak for itself through what is done with it. Those around a research team can appreciate its value, in its own terms, when they see more tangible outcomes. Doing something with data can take many forms (presentations, reports, scenarios, product concepts and two dimensional prototypes) each of which allows different organizational stakeholders to appreciate different forms of research value. Many audiences of ethnographic research, as poet Birago Diop once suggested, 'listen more to things than to words that are said'.

Our research did put mobility on the map. Literally, we created maps of mobility in rural Ireland that made older people's journeys visible. Rhetorically, we created a strong case for taking mobility seriously, as an enabler of independent living as the link between people, homes, social lives and a seam of services that make ageing in place possible. But the 'end of all our exploring' was not just a story about mobility but a different view of home, sociality and independence in late life.

ACKNOWLEDGMENTS

imagination to support this collaboration. Tina Basi and Adam Drazin conducted much of the fieldwork, and received support from, amongst others, Julie Behan and Adrian Burns in the Digital Health Team. John Sherry and David Prendergast provided close readings of an earlier version of this paper.

REFERENCES

Auslander, G. K., & Litwin, H.
1991   Social networks, social support, and self-ratings of health among the elderly. *Journal of Aging and Health*, 3(4), 493-510.

Banister, D & Bowling, A.
2004   "Quality of life for the elderly: the transport dimension", *Transport Policy, 11, 105-115.*

Chatwin, Bruce.
1988   *The Songlines*. London: Picador.

Department of the Environment, Heritage and Local Government
2002   *National Spatial Strategy 2002 to 2020*. Dublin: Stationery Office.

Foster , Roy. F.
2007   *Luck and the Irish: A Brief History of Change from 1970-2000*. Oxford: Oxford University Press

Hammel, Joy.
2004   Assistive Technology as Tools for Everyday Living. In Gerotechnology: Research and Practice in Technology and Aging: A textbook and reference for multiple disciplines. Pp. 119-131. New York: Springer Publishing Company.

Holland, C., Kellaher, L., Peace, S., Scharf, T., Breeze, E., Gow, J. and Gilhooly. M.
2005   Getting out and about. In Walker, A. (Ed.), Understanding quality of life in old age. Berkshire: Open University Press.

Kellet, P, Gilroy, R & Jackson, S.
2005   Space, Identity and Choice: Exploring the Housing Arrangements of Older People, in Martens, BV and Keul, A (Eds) *Designing Social Innovation : Planning Building, Evaluating*. Rohnsweg: Hogrefe & Huber

Lefebvre, Henri
1991   *The Production of Space*, D. Nicholson-Smith trans., Oxford: Basil Blackwell.

National Council on Ageing and Older People

2005   *Health and Social Services for Older People II (HeSSOP II): Changing Profiles from 2000 to 2004*. Report No. 91. Dublin: NCAOP.

Mollenkopf, H. *et al*
2004   Social and behavioural science perspectives on out-of-home mobility in later life: findings from the European project MOBILATE", *European Journal of Ageing* (1) 45-53.

O'Neill, D. and Carr, D.
2006   Transportation, Driving, and Older Adults. In *Principles and Practice of Geriatric Medicine*, 4th Edition. Edited by M.S. John Pathy, Alan J. Sinclair and John E. Morley. John Wiley & Sons, Ltd.

Rittner, B. & Kirk, A. B
1995   Health care and public transportation use by poor and frail elderly people. *Social Work*, 40(3), 365-373.

Roberts, Simon. et al.
2007   *Connections: Mobility and Quality of Life for Older People in Rural Ireland. A Report based on research by Intel, in collaboration with the Rural Transportation Programme.* Intel Corp.

Saris, J.
1996   Mad Kings, Proper Houses, and an Asylum in Rural Ireland, *American Anthropologist.* 98(3):539-554.

Tinker, A
1994   *The role of housing policies in the care of elderly people, in caring for frail elderly people*, Paris: OECD Publications.

Turner, Victor.
1969   *The ritual process: structure and anti-structure*. Ithaca: Cornell University Press.

Wiles, Janine L.
2005   'Home as a New Site of Health Care Consumption' in Andrews, Gavin and David R. Phillips (Eds) *Ageing in Place: Perspectives, Policy, Practice,* London: Routledge, pp. 75-97.

Williams, Raymond
1975   *The Country and the City*. Oxford: Oxford University Press.

The QAME of Trans-disciplinary Ethnography: Making Visible Disciplinary Theories of Ethnographic Praxis as Boundary Object

ELIZABETH (DORI) TUNSTALL

University of Illinois at Chicago

Framed by the idea that ethnography is a trans-disciplinary praxis, this paper adopts Alan Barnard's framework of the theory as questions, assumptions, methods, and evidence (QAME) to compare how ethnographic praxis is approached across the domains of anthropology, marketing, and design. The companies Intel, Cheskin, and IDEO serve as exemplars for each domain, respectively. Through a content analysis of academic journals and popular media, the paper explores the discursive meanings of ethnography as a "boundary object" across many domains. The paper concludes with how Barnard's QAME framework can be used to make visible ethnography's multiple meanings so that practitioners can improve interdisciplinary collaborations within organizations and better articulate ethnography's value to business.

INTRODUCTION: ETHNOGRAPHY AS TRANS-DISCIPLINARY BOUNDARY OBJECT

Beyond its origins in anthropology, ethnography has virally replicated into forms of design ethnography, marketing ethnography, ethnographic evaluation of policy, educational ethnography, etc. Its cyclical hyper-visibility in the business pundit media such as Fast Company and Business Week only muddles its visibility in business contexts of production (design) and consumption (marketing). Yet as defined by the *Manifesto of Transdisciplinarity*, ethnography can now be considered a trans-disciplinary praxis:

> Transdisciplinarity concerns that which is at once between the disciplines, across the different disciplines, and beyond all discipline. Its goal is the understanding of the present world, of which one of the imperatives is the unity of knowledge (Nicolescu 2007).

Ethnography no longer "belongs" to any discipline; it operates between, across and beyond disciplines as diverse as anthropology, sociology, business, politics, design, engineering, medicine, and education. Within this diversity, it maintains its core intention to understand the present world. What distinguishes ethnography from other philosophical orientations towards knowledge is the belief that the one must understand and represent knowledge of the present world from the ways of being of the people studied (Tunstall 2006). From the synthesis of the multiple ways of being and knowing the world comes the "unity of knowledge" that is the trans-disciplinary imperative.

Ethnography's trans-disciplinary position poses interesting opportunities in regards to its role across the social worlds of anthropology, marketing, and design. Ethnography has successfully become a boundary object that "…inhabits several intersecting social

worlds…and satisfies the informational requirements of each" (Star and Greisemer 1989: 393). Each social world claims their own form of ethnography as distinct from how practiced by the others, yet share enough similarities to sustain a conference on ethnographic praxis in industry. Beyond the term, one can speculate that it is the satisfaction with the information that ethnography provides which brings these groups together. What is the informational requirement that ethnography satisfies? It is the desire to gain a truer understanding of human (group and individual) behaviors. Yet, in spite of this shared desire, I argue that the resultant human understanding is put to different ends in anthropology, marketing, and design. Thus, ethnography's ubiquity raises certain challenges and questions for its praxis. How does ethnography operate as a boundary object for design compared to anthropology, or marketing? What does a designer mean by his or her praxis of ethnography versus a marketer's praxis ethnography? And how does the variances in the meanings of ethnography in those domains affect ethnography's ability to develop and maintain "coherence across intersecting social worlds" (Star and Gerisemer 1989: 393)?

To analyze and make visible the variances in meaning of ethnography, this paper uses Alan Barnard's (2000) notion of theory as defined as made up of four elements: questions, assumption, methods, and evidence (QAME). Methodologically, a content audit of both popular and academic literatures serves as data for defining the meaning of anthropological ethnography, marketing ethnography, and design ethnography. Visualized as a matrix, each ethnographic domain is systematically classified according to its hegemonic questions, assumptions, methodological approach towards ethnography, and evidence. Three exemplars of each type of ethnographic praxis are analyzed: the work of Intel's People and Practices Group for anthropology, the work of Cheskin for marketing, and the work of IDEO for design. The paper concludes with the implications of the multiple meanings of ethnographic praxis for its theoretical and practical visibility and efficacy in the design and marketing domains.

THE "QAME" OF THEORY: QUESTIONS, ASSUMPTIONS, METHODS, AND EVIDENCE AS COMPARATIVE FRAMEWORK

In his book *History and Theory in Anthropology*, Alan Barnard (2000: 5-6) defines theory as made up of four elements: questions, assumption, methods, and evidence (QAME). While there are other definitions of theory, I find his framework most useful for sharing with interdisciplinary colleagues and students due to its flexibility and lack of pretentiousness. Barnard's framework is flexible because every domain has a set of questions it seeks to answer, a set of assumptions it holds dear, a methodological approach towards getting to the answers it seeks, and its own notion of proper evidence. One can use Barnard's QAME to engage in a conversation of what are the questions of anthropology, marketing, and design; what are the assumptions that each domain brings to the table, how does each domain approach answering its questions through ethnography, and what does it use to communicate to others as evidence or proof. Defining theory within the non-pretentious framework of QAME enables both academics and practitioners within and across domains

to discuss the similarities and differences in how they build and utilize knowledge. And while these discussions often take place in competitive and, sometimes, accusatory tones on listservs, blogs, and conference hallways, the QAME framework enables discussions to be grounded in a shared systematic analytical process. It is my assertion that anthropology, marketing, and design represent different theoretical perspectives on ethnographic praxis based on each domains specific questions, assumptions, methods, and evidence: Table 1. These differences reflect ethnography's adaptations to the multiple environments in which its contemporary praxis finds itself.

Table 1. Matrix of the QAME of ethnography across three domains

	Anthropology	**Marketing**	**Design**
Questions	What does it mean to be human?	How does one allocate resources to move customers to buy goods and/or services?	How does one design a successful product, service, communication, or experience?

Assumptions
  - **Issues**
  - **Roles**
  - **Scale**
	- Origins, evolution, and meaning
	
	- Anthropologist as instrument
	
	- Qualitative significance
		- Economic rational choice
		
		- Marketer as selector
		
		- Quantitative significance
			- Context and user requirements
			
			- Designer as intermediary
			
			- Qualitative significance

Methodological approach towards ethnography	Preferred epistemological stance	"Intimate" consumer insight	Empathic intuition
Evidence	Informal conversation Experiential textual report	Formal presentation Strategic report	Concepts Prototypes

THE "QAME" OF ANTHROPOLOGICAL ETHNOGRAPHY

The role of ethnography in anthropology has almost mythological status. By this, I mean that people treat it as if the practice is frozen in the times of Malinowski's *Argonauts of the Western Pacific* or Margaret Mead's *Coming of Age in Samoa*. Popular perceptions of anthropological ethnographic praxis in the trade publications continue to emphasize ethnography's Colonial past, with images of pith helmets and the language of exoticism.

Lucy Suchman (2007) in a conference presentation entitled "Anthropology as Brand" analyses the over fifteen years in which trade publications such as *Business Week*, *the New York Times*, and *Fast Company* have described anthropologists "going native" in the corporate world. The persistence of the exotica mythology of anthropological ethnography is unfortunate because it allows people to ignore the vibrancy of contemporary anthropological ethnographic praxis, both academic and industrial. As Bill Maurer (2005: 1) describes in the AAA flagship journal, *American Anthropologist*, "ethnographic emergences" include the anthropology of science, technology, law, media, the environment, or even design, which can now be "repatriated to the center of anthropology." To illustrate the vibrancy of these ethnographic emergences, this section follows the trajectories of anthropological ethnography among the Peoples and Practices Group (PaPR) at Intel.

Anthropological questions

In any introductory anthropology textbook, it states that the fundamental question of the anthropology is "What does it mean to be human?" Anthropology investigates this question from a variety of perspectives: from the distant past in archaeology to the near future in socio-cultural anthropology, and from human biological diversity in physical anthropology to the symbolic diversity of languages in linguistics. The meaning of that humanness evolves over time, but the field encompasses the breadth and depth of exploration of the human condition. How is it that Intel's People and Practices Research (PaPR) Group's ethnography is geared to address anthropological questions?

On the Intel website, the PaPR Group states clearly that their mission is to "…develop a deep understanding of how people live and work." This understanding becomes insights that guide Intel's strategy and long term R&D, with the ultimate goal of ensuring "that future Intel products satisfy people's real world needs." The longer-strategic time frame allows for the group to ask much broader questions framed by very classical anthropological problems areas such as the nature and/or nurture, evolution, internal-external, and emergent social facts (Bernard 2006, Tunstall 2008)[1]. Intel's PaPR project, Mobile Times, addresses the internal-external problem of how behavior is influenced by temporal values of leisure/non-leisure or environmental conditions of mobility. Its intentions are described as "developing a theory based on people's perception of time on a global scale that emphasizes how people today are communicating with others" (Johnson 2007: 12). The Small Country Effect project looks at the evolution (i.e. patterns of change and growth) of technology adoption in small countries. Its Women and Technology Adoption project frames how gender as nature or nurture affects women's relationships with information and communication technologies. The Personal Digital Money project asks how people influence each other socially through emergent forces of electronic payment systems. Although diverse, Intel's PaPR share a central question of how technology figures into the definition of humanness. As PaPR group

---

[1] Many large organizations with ethnographic R&D functions, such as Motorola and Pitney Bowes have distinct long-term strategy more anthropologically-based groups and mid-to-short term strategy more design-based groups tied to specific product/business lines.

leader, Maria Bezaitis, was quoted in *Electronic Engineering Times*, "We start in the social world and work our way back to technology" (Johnson 2007: 12). The focus on anthropological questions distinguishes the PaPR group from other ethnographic groups at Intel, whose work adheres more closely to the questions of design ethnography, as I will address later. Now, I turn to the assumptions underlying anthropological ethnography.

Anthropological assumptions

The American Heritage Dictionary (2007) defines an assumption as "… something taken for granted or accepted as true without proof." Assumptions intrigue me because they tend to be tied to group stances about what issues are important, what roles the group or individual plays in the issue, and what is the scale of engagement/impact. As represented in the both the academic and trade literature on ethnography, the key issues of anthropological academic praxis concern the origins of human phenomena, their evolution over time and space, and the meanings they carry for people at a qualitative scale. This issue of origins—biologically, materially, linguistically, and socio-cultural—is probably the most defining character of traditional anthropology. An title keyword search of the word "origin" in Anthrosource, the database of academic anthropological journal articles, resulted in over 169 articles ranging from 19th century studies of the origin of maple sugar (Henshaw 1890) to 21st century studies of the origin of extinction (Hamberger 2005). The focus on origins is tied to the anthropological concern with evolution, or how phenomena change over time and space. The origin does not have to be absolute, but rather it is a starting point by which to follow the path of changes to their current and future conclusions. What is the subject of this change? It is the meaning of the human phenomenon examined. E-lab captured this emphasis in its statement, "This means something." For Intel, the PaPR group wants to understand the changing meanings of technology for humans across space and time.

With an emphasis on participant-observation, the anthropological ethnographer's role is that of an instrument of knowledge. As Michael Agar (1980: 79) describes, the role of the ethnographer is to learn, metaphorically, as child and student, in order to give account in such as way that reduces "the difference between two accounts, such that mine better approximates a group member's." *MarketWatch* reports on Genevieve Bell's research for Intel:

> She does as the locals do. If that means staying up late, she does. If that means drinking too many cups of teas, she indulges. If that means hanging out in the market, she tags along (Andrejczak 2005: 1).

Because the ethnographer is the instrument of knowledge him or herself, this limits anthropological ethnography to a scale of qualitative significance. Higher scales can be reached with teams of anthropological ethnographers, but the need to give account limits the number of accounts an ethnographer can collect, retain, and most importantly, align. In turn, the assumptions of issues, roles, and scale in anthropological ethnography affect the methodological approach to ethnography and its resultant evidence.

Theories of Praxis as Boundary Object

Methods: Ethnography as epistemology

The online American Heritage Dictionary (2007) defines method as "… a means or manner of procedure especially a regular and systematic way of accomplishing something." For anthropological ethnographers, ethnography is a method of epistemology or way of knowing the world and oneself. The anthropological ethnography seeks to address in a regular and systematic way address the question of human-ness by looking at how people know what they know in relationship to what others know and/or knew. The anthropological ethnographer uses ethnography to accomplish knowledge by experiencing for him or herself the different aspects of the human condition. In the descriptions of the PaPR group's contributions, it is always emphasized how the research contributes to organization focus and strategic direction (i.e. epistemology) as well as or eventually leading to portfolios of objects (Johnson 2007, Andrejczak 2005).

Anthropological evidence

How do you convince others that you have understood human nature through your ethnographic research? You present evidence in forms that your communities find persuasive and convincing. The evidence of anthropological ethnography takes two forms: one for its internal communities and another for its external communities. The internal form is often the informal conversation (Tunstall 2006). Because the anthropologist sees him or herself as the instrument of research, the informal conversation continues in the legitimizing tradition of ethnographers as merchants of the exotic. While formal presentations are given, Bruce David (2003: 32) warns in the magazine *Brand Strategy*, "Ethnographic research's true value is in the experience of communication and dialogue with the researcher. It is about questions and interpretation (Q and I)." Among anthropological ethnographers, the one-to-one dialogue over coffee is seen as more effective than these wider forums for supporting Q and I instead of Q and A (Tunstall 2006).

The external form of evidence is the experiential textual report. Anthropological ethnography still clings to its academic publication model of evidence, often collaborating with academy-based authors. The non-proprietary nature of their broad research themes contributes to the ability to publish in journals and conference proceedings such as *Ubicom*, *AMC-CHI*, *Human Computer Interaction*, *Electrical Engineering and Computer Sciences*, *New Media & Society*. Following with contemporary ethnographic practices, their accounts are more "messy ethnographies" that combine image, text, personal narrative, and "objective" description to critically interpret human phenomenon.

Anthropological ethnography inhabits a distinct space of ethnographic praxis based on its framing question of what does it mean to be human; its assumptions derived from the focus on origins, evolution, and meaning, the role of the anthropological ethnographer as the instrument of knowledge which limits its scale to that of qualitative significance; its use

of ethnography as epistemology or way of knowing, and informal conversation and experiential textual reports as evidence.

THE "QAME" OF MARKETING ETHNOGRAPHY

By many accounts, marketing ethnography came to the fore in the 1980s as marketers sought to understand "…consumer-choice dynamics under a world system dominated by mature market capitalism" (Mariampolski 2005: 12). In the article, *Reel to Real*, journalist Nate Cavalieri, describes the difference between anthropological ethnography and commercial or marketing ethnography:

> By its academic definition, ethnography is the study of behavior in its natural environment, used mostly for academic anthropology; when that observation is used by a company to understand the way its products affect people in the world -- usually by videotaping or audiotaping consumers -- it's called commercial ethnography. *The idea is to get to know the consumer better than he knows himself* [Emphasis mine] (Cavalieri 2005: 3).

Anthropological ethnography seeks to understand people *as well as* they understand themselves to generate and share knowledge about human nature. The concept of getting to know the customer better than he or she knows himself speaks to the particular context of marketing ethnography, in particular, the importance of consumer "insight" in the competitiveness of marketing and advertising business functions. The questions, assumptions, methods, and evidence of marketing ethnography are informed by the drive to enact specific causes and effects informed by deeper insight into the target customer. The over 20-year old marketing and innovation firm, Cheskin, exemplifies an organization whose work illustrates ethnographical praxis in the context of marketing.

Marketing questions

Marketing 's fundamental question is, "How does one allocate resources to move customers to buy goods and/or services?" For the market researcher, this opens up two areas of inquiry. The first is learning what moves customers to buy, exemplified popularly in Paco Underhill's (1999) work on the "science of shopping". The second is determining the marketing mix of product, price, positioning, and placement that will meet specific business goal. While marketing ethnography can contribute to both areas of research, it tends to be applied most often to the first. Both the academic and trade marketing literatures tout ethnography as a way to get beyond demographics and focus groups to understand what moves customers. Marketing ethnography must address specific business goals: Figure 1.

Figure 7. Author's mapping of qualitative research methods to marketing challenges questions

Marketing professors, Eric Arnould and Linda Price (2006: 260) revisit the importance of market-oriented ethnography to companies "identify new opportunities and increase significant bottom line metrics." The focus on customer lifetime value and metrics ties marketing ethnography back to its primary question of how to allocate resources to move customers to buy. Cheskin positions its marketing ethnography as providing ROI (return on investment) that ties back to moving more units of product or services by better defining existing or creating new markets of customers in relationship to the business's competition.

Marketing assumptions

Marketing ethnography's assumptions are those of its business economic contexts: dominance of economic rational choice model, the marketer's role is as selector, and a scale of quantitative significance. In marketing ethnography, the customer, who is not addressed

as a human, adheres to variations of economic rational choice behavioral models[2]. Economic rational choice model posits that the individual will make the decision, from available information, that best optimizes his or her own preferential interests. The role of ethnography in marketing is often to demonstrate the emic "rationality" of the consumer's behaviors by translating them for the business context. Modeled in the customer reach-acquisition-conversion-retention lifecycle model, the intentions of marketing are to demonstrate to the customer that their best interests are served by the product or service through those phases. The necessity of feeding into the customer lifecycle model constrains the meanings gained from ethnographic understanding in the marketing context.

The assumptive role of marketer—who segments, qualifies, and quantifies the consumer—is one of selector of the value of humans. Knowing the customer better than he or she knows him or herself requires a distance from the customer. As quoted in *The Toronto Star* (2006: D01), Steve Diller of Cheskin states, "If you want to understand what people care about, you don't ask them, you watch them." Watching people is a distancing technique different from anthropological participant-observation. But I argue that this distancing is necessary because the marketer actually makes decisions about which customers are more valuable than others through segmentation. Making these decisions are difficult when you are connected too intimately with individual people.

Marketing's determination of human value—as driven by the costs associated with consumer investment—preclude the need for quantitative significance as a distancing technique in spite of ethnography's intimacy. Scalability becomes a means to address the necessary for quantitative significance. In a 2003 DMI article, then Cheskin principal, Davis Masten and design anthropologist, Tim Plowman, promote digital ethnography as the "new wave in understanding customer experience." They underscore the "opportunity for scalability" as one of Digital Ethno's benefits (Masten and Plowman 2003: 6).

Methods: Ethnography as intimate consumer insight

Those who practice marketing ethnography carefully frame their intentions as gaining customer insight. Masten and Plowman state explicitly, "Our goal is to produce new, deep, continuing, and rapid insight's into people's lives and needs" (2003: 2). What do they mean by insight? According to the Encarta World English Dictionary (2007), insight is defined as "perceptiveness: the ability to see clearly and intuitively into the nature of a complex person, situation, or subject." The consumer is a complex person. Focus groups, surveys, MRI tracking, and other marketing methods provide insight, but ethnography provides intimate insight by its ability to get side people's heads by getting into their homes, offices, cars, streets, bathrooms, and sometimes even their showers.

---

[2] There are many critiques of rational choice model in marketing based on its assumptions of omniscience, individuality, and context-free criteria. See Douglas Allen's (2002) and Joel Sobel's (2005) reviews of the consumer choice literature. However, rational choice models remain the dominant paradigm that one must address or critique when discussing consumer behavior.

Theories of Praxis as Boundary Object

Arnould and Price (2006: 251-253) identify three levels or forms of market-oriented ethnographic research. First, macro-level research seeks to "get inside people's heads" to capture brand character, cross-cultural desires, or cultural brandings. Second, micro-level research focuses on either task-based analysis of products-in-use in people's everyday lives or studies of extreme brand communities. The micro-level research characterizes the majority of ethnographic praxis by small and individual ethnographic marketing firms, especially those who rely upon video. Lastly, their meso-level research focuses on consumers' relational preferences and practices. Regardless of the level, marketing ethnography must demonstrate that it has discovered some intimate insight into consumer behavior through evidence.

Marketing evidence

Marketing evidence takes many forms, but the formal presentation and the strategic report are the two that the marketing community considers most persuasive and convincing. Contextually, the formal presentation dominates as evidence because marketing decisions often require the buy-in of several executives across multiple divisions (Johnson 2004: 320). The formal presentation also persuades the clients more effectively of the marketer's knowledge of their consumer business challenges and the validity of the strategic solution to those challenges. Again, the marketer determines the human value of the target to the client, and therefore must demonstrate that he or she knows the customer better than the client and the customer themselves. Even with the current extensive use of video, the structure of the formal presentation focuses intimate consumer insights within the client's business lenses of, for example ROI, due to its time constraints (ex. 25-40 minutes) and specific audience (ex. business executives).

The strategic report is the leave-behind document that allows for more in-depth study of the marketing research's process, insightful outcomes, and most importantly, recommendations that justify the allocation of resources. What distinguishes the strategic report from the experiential textual report is that it is almost always proprietary. In addition, the marketing ethnographer's presence in the research is found not in the experiential role of data collection, but rather in the expert authority of the recommendations.

In summary, marketing ethnography represents a distinct praxis of ethnography based on the question of how to justify the allocation of resources based on consumer behavior. Assumptions of consumer rationality, the marketer's role of selecting valuable consumers, and the need for quantitative significance directly influences marketing's ethnographic praxis. Intimate insight defines the methodological goals of marketing ethnography so that the marketer demonstrates his or her superior knowledge of the consumer's value to the client. The focus on sets of client stakeholders makes formal presentations and strategic documents the most persuasive forms of evidence.

THE "QAME" OF DESIGN ETHNOGRAPHY

While marketing ethnography seeks human understanding in order to move consumers to buy, design ethnography seeks human understanding in order to design the product, communication, or experience that could be bought. Of Intel's more platform-based research group, Tony Salvador and Michael Mateas (1997: 166) define design ethnography as "a set of data collection and analysis perspectives, assumptions, and skills that can be used effectively and efficiently to understand a particular environment, or domain of people for the express purposes of designing new technology products." Paul Rothstein (1999) outlines four reasons for ethnography's reemergence in design in the 1990s: its ability to link designers to users, help clients succeed in competitive marketplace, support growth in industrial design, and enhance designer's creativity. The semantic shift from humans and consumers to users exemplifies how the domain of design ethnography is distinct from anthropological and marketing ethnography. The company IDEO is the exemplar of ethnography in the field of design.

Design questions

The main question of design is "How does one design a successful product, service, communication, or experience?" Ethnography intersects with design in the definition of success. Rothstein (1999: 5) describes how for top industrial designers in the 1950s and 1960s –Henry Dreyfuss, Robert Probst and Bill Stumpf of Herman Miller—success meant having "…a basic level of truth about the way people work, play, sleep, travel, take baths…" IDEO (2008), in describing their process on their website, locates the success of any big, disruptive offering in its "…ability to satisfy a latent human need, behavior, or desire." Contemporary design defines success as meeting and extending the delight of users' experiences.

Design assumptions

According to the academic and trade literature, design ethnography's main assumptions include a focus on the issues of context and user requirements, the role of the designer as an intermediary, and a scale of qualitative significance. Getting out of the studio and into the contexts of users through field research has been the main driver of ethnography's praxis within design (Salvador and Mateas 1997, Rothstein 1999, Ante and Edwards 2006, Rogers 2006, Whitemyer 2006). To quote David Rogers, "I appreciate design ethnography's emphasis on exploring how people actually *use* Web sites and products in the *contexts of their lives*—and not merely by how they explain it." The design ethnographer internalizes this knowledge in order to serve as an intermediary between the users' needs and their expression in prototypes. IDEO (2008) states how it is their designers who are "seasoned observers of people and how they interact with the world," although they caveat the leadership of their human factors specialists in that task. Similar to the anthropological ethnographer, the design ethnographer's ability to absorb human experiences limits the scale to qualitative significance.

Methods: Ethnography as empathic intuition

One of the interesting things about selecting IDEO as an exemplar of design ethnography is that the company carefully avoids using the term ethnography (Whitemyer 2006). This is in contrast to the 1990s and early 2000s, when IDEO was one of the strongest advocates for ethnography (Gilmore 2002). This shift represents the emergence of design research and design thinking as design-proprietary knowledge systems for design praxis. The need to create designs for an unknown future reshapes ethnography from an analytical tool to one of many available inspirational tools for designers. As IDEO chief creative officer, Jane Fulton Suri, explains:

> Design research both *inspires imagination* and *informs intuition* through a variety of methods with related intents: to expose pattern underlying the rich reality of people's behaviours and experiences, to explore reactions to probes and prototypes, and to shed light on the unknown through iterative hypothesis and experiment (Suri 2008: 54).

Ethnographic praxis in design is characterized as mostly observational. IDEO designers observe people. The observational focus provides design ethnographers with just enough empathy for users. Designers "suggest in advance" what designed objects, communications, and experiences users need and desire (Rothstein 1991). Ethnographic observation provides designers distance from the user in order to create.

Design evidence

Acceptable forms of evidence in the design community are design concepts and prototypes. Design concepts are ideas for solving design problems. Prototypes are the built and iterated manifestation of those ideas. IDEO has widely promoted their prototyping culture. IDEO General Manager, Tom Kelley (2001: 36) writes, "Prototyping is problem solving. It's a culture and a language. You can prototype just about anything—a new product or service, or a special promotion." The textual reports of anthropological and marketing ethnography are not just transformed into pictures, but prototypes. As stated by IDEO (2008), prototyping allows the design ethnographer/designer to "…provide stakeholders with the ability to evaluate an idea through direct and experiential learning, and to create a common vision that informs everyone involved." Interestingly, trade publications focus on the final successful product as opposed to the prototype in their discussion of ethnography in design.

In summary, design ethnography's question of how to design successful objects, communications, and experiences leads to a focus on users and contexts as the requirements of success and designers as intermediary translators of those qualitative needs. Ethnography operates as a methodological approach to gain user empathy. Empathy gets converted into

intuitions for creating tangible prototypes as evidence. As such, design ethnography is theoretically distinct from anthropological ethnography and marketing ethnography.

CONCLUSION: MAKING VISIBLE TRANS-DISCIPLINARY MEANINGS OF ETHNOGRAPHIC PRAXIS

Having worked in anthropological, design, and marketing domains, I've engaged in all three forms of ethnographic praxis. Making the differences visible represents my attempt to clarify ethnography as a boundary object at the intersection of various domains. Anthropology, marketing, and design each represent a distinct theoretical orientation towards ethnography. The frictions among ethnographic practitioners across domains stem from our desires to make our ethnographic theory the single definition of ethnographic praxis. These frictions are no longer sustainable given the greater uses and responsibilities presented to ethnographic praxis in industry. In order to demonstrate its value to business, ethnography has naturally adapted to its various environments, while maintaining its coherence around the focus on understanding human experience from the perspective of the people studied. Applying Barnard's QAME framework to ethnographic praxis, the questions, assumptions, methods, and evidence of ethnography in anthropological, marketing, and design researches are different. We cannot clearly articulate our value as a community of ethnographic practitioners until those distinctions are made visible and then subsumed within a trans-disciplinary desire to create a unity of knowledge.

NOTE

REFERENCES

Agar, Michael
1980   *The Professional Stranger: an Informal Introduction to Ethnography*. San Diego, CA: Academic Press.

Andrejczak, Matt
2005   Intel anthropologists dig up vital information. *MarketWatch*, September 22.

Ante, Spencer E., and Cliff Edwards
2006   The Science Of Desire; As more companies refocus squarely on the consumer, ethnography and its proponents have become star players. *Business Week* (5 June 2006):98.

Arnould, Eric J., and Melanie Wallendorf
1994   Market-Oriented Ethnography: Interpretation Building and Marketing Strategy Formulation. *Journal of Marketing Research* 31 (4): 484-504.

Barnard, Alan
2000   *History and Theory in Anthropology.* New York: Cambridge University Press.

Cavalieri, Nate
2005   *Real to Reel.* SF Weekly.Com (16 March), http://www.sfweekly.com/2005-03-16/news/real-to-reel/. (accessed 5 September 2008).

David, Bruce
2003.   Brand Papers: In the eye of the beholder. *Brand Strategy*, September 10, 32.

Galinat, Walton C.
1988   The Origin of Maiz de Ocho. *American Anthropologist* 90 (3):682-683.

Gilmore, David
2002   Understanding and Overcoming Resistance to Ethnographic Design Research. *Interactions* 9 (3):29-35.

Hamburger, Tiffany Marie
2005   The Origin of Extinction. *Anthropology & Humanism* 30 (1):70-80.

Henshaw, H. W.
1890   Indian Origin of Maple Sugar. *American Anthropologist* 3 (4):341-352.

Johnson, R. Colin
2007   People Study Group Gets Technical. *Electronic Engineering Times*, June 11, 16.

Kelley, Tom
2001   Prototyping is the Shorthand of Design. *Design Management Journal* 12 (3):35-42.

Mariampolski, Hy
2005   *Ethnography for Marketers: a Guide to Consumer Immersion.* New York, NY: Sage Publications.

Masten, Davis, and Tim Plowman
2003   Digital Ethnography: the next wave in understanding customer experience. *Design Management Journal* 14 (2):75-81.

Maurer, Bill
2005   Introduction to Ethnographic Emergences. *American Anthropologist* 107 (1):1-4.

Nicolescu, Basarab
2007   Except from the book Manifesto of Transdisciplinarity, ed. International Center for Transdisciplinary Research. Place Published: SUNY Press. http://nicol.club.fr/ciret/english/visionen.htm (accessed 30 Jan 2008).

Rogers, David
2006   *Coming of Age in Ethnography.* Gotoreport (April),
          http://www.gotomedia.com/gotoreport/april2006/coming_of_age.html.

Rothstein, Paul
1999   The "Re-emergence" of Ethnography in Industrial Design Today. In *IDSA 1999 Design
          Education Conference.* Chicago, IL: Industrial Designer's Society of America.

Salvador, Tony, and Michael Mateas
1997   *Design Ethnography: Using Custom Ethnographic Techniques to Design New Product Concepts.* In CHI
          97. Atlanta, Georgia: CHI 97 Electronic Publications.

Star, Susan Leigh, and James R. Griesemer
1989   Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in
          Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science* 19 (3):387-420.

Suchman, Lucy
2007   Anthropology as 'Brand': Reflections on Corporate Anthropology. *In* Colloquium on
          Interdisciplinarity and Society. Oxford University.

Suri, Jane Fulton
2008   Informing Our Intuition: Design Research for Radical Innovation. *Rotman Magazine*, 53-57.

Toronto Star Staff
2006   Next Up: Neuromarketing, the Scientist in Aisle 3. *Toronto Star*, May 7, D01.

Tunstall, Elizabeth
2006   The Yin Yang of Ethnographic Praxis in Industry. In *Ethnographic Praxis in Industry Conference
          Proceedings, Portland, OR.* Berkeley, CA: National Association for the Practice of
          Anthropology/University of California Press.

2008   *Design Anthropology: What does it mean to your design practice?* Adobe Design Center Think Tank
          (May 13), http://www.adobe.com/designcenter/thinktank/tt_tunstall.html.

Underhill, Paco
1999   *Why We Buy: the Science of Shopping.* New York: Simon and Schuster.

Whitemyer, David.
2006   *Anthropology in Design: an old science makes a new impact on interior design.* IIDA Perspectives
          (Spring), http://www.iida.org.
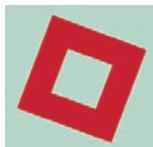
Web resources
"Assumption"

2007   In The American Heritage® Dictionary of the English Language, Fourth Edition.
                Houghton Mifflin Company, http://www.answers.com/topic/assumption. (accessed 5
                August, 2008).
"Insight"
2007   In MSN Encarta World English Online Dictionary, Microsoft Corporation,
                http://encarta.msn.com/dictionary_1861621532/insight.html. (accessed 5 August,
                2008).
"Method"
2007   In The American Heritage® Dictionary of the English Language, Fourth Edition
                Houghton Mifflin Company, http://www.answers.com/topic/method. (accessed 5
                August 2008).

http://www.ideo.com, accessed 5 September 2008.

http://www.intel.com, accessed 5 September 2008.

PANEL: DIRECTORS OF THE FUTURE

Session Curators

JACOB BUUR
SPIRE, University of Southern Denmark

LUIS ARNAL
in/situm

Panelists:

MICHAEL WINNICK
gravitytank

KEN ANDERSON
People and Practices, Intel Corporation

NINA WAKEFORD
INCITE, Goldsmiths College, University of London

Moderator:

CLAUS HAVE

Actors:

SANNE GRANDGAARD
PER LYKKE HANSEN
RASMUS SØNDERGAARD
Dacapo Theatre

For the panel at EPIC 2008 we invited three prominent ethnographers, from consulting, corporate and academic environments, to stop thinking about the past and present (usually the realm of ethnography) and to "play" with a future vision of ethnography. Ahead of the conference the panelists engaged in a storytelling process with actors from the Dacapo Theatre to create a concrete scenario of what the future might hold. Theatre has the capacity to speak directly to personal experiences and emotions. With this panel we wanted to move beyond the slightly distanced, reflective stance that ethnographers may take towards their own practice.

Based originally in a forum theatre tradition, the Dacapo Theatre has 15 years of experience working with organizational change in businesses and public organizations. It has developed theatre into a framework for learning and collaborative engagement in a Scandinavian participatory tradition. In recent years Dacapo has engaged in user-driven innovation in for instance the health sector, acting out 'users' in real life situations to encourage industrialists to establish empathy and discuss consequences of technology interventions. Dacapo is a partner in the new Danish strategic research centre SPIRE on participatory innovation.

At the conference the actors played each of the scenarios, invited the audience to discuss what they saw, and gave the panelists the opportunity to explain their intentions.

Michael Winnick   **The Client Ethnographer**

The 'organizational ethnographer' spends time studying the practice of his client, before engaging in the actual project.
–   The idea of using ethnographic interviews as a prelude to our engagement with clients is a really powerful way of understanding and empathizing with their needs. We make tremendous assumptions, I think, as a field, and certainly as an agency.

ken anderson **Rubberband Relations**

A business manager is invited along to visit the home of a lead-user with the ethnographer – on the condition that he doesn't interfere with the study. But he later learns that competition has replaced ethnography entirely with digital surveillance techniques and close customer participation.

– I was trying to get out two different points: One is our relationship to both the participant on the research side, and also to the participant on the client side. The other is how our methods are (or are not) facilitating the new way of thinking about those relationships.

Nina Wakeford **Performative Anthropology**

The student of anthropology presents her field study of a rather mundane daily life situation in an excessive, engaging manner.
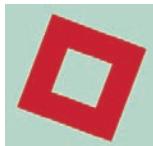
– I was thinking about the notion of 'emotional contagious', and how when we make presentations to businesses or other disciplines we need to enter this performative mode.

Questions Raised

This panel was an experiment on trying to visualize the future of our practice. The objective was to provide thought-provoking scenarios in order to generate questions, more than answers.

– Will we continue to do traditional ethnography forever? How will we innovate within our practice? And how will we employ new tools and technology?
– Will we need to increasingly use our capabilities inside our clients? Can ethnography expand to a range of specialties in industry? And how will we make it more relevant to clients?
– Shall we teach anthropology students new skills to communicate ethnographic results in a more compelling and engaging way to business?

We hope that these type of questions can help us advance the discipline because it is in forums like EPIC where practices evolve.

Tracing the Arc of Ethnographic Impact: Success and (In)visibility of Our Work and Identities

DONNA K. FLYNN
TRACEY LOVEJOY
Microsoft Corporation

This paper explores ways in which ethnographic impact in a large technology corporation is perceived, re-defined, and recognized – by both practitioners themselves and corporate stakeholders. The authors trace a history of ethnographic successes and stumbles, and ways they have confronted a strong usability paradigm that has shaped organizational assumptions of impact and value for product research. They then identify ways in which contextual analysis of their own practice in the corporation led to the successful creation of a strategic engagement model for ethnography, resulting in its growing influence. Through critical analysis of the conditions of influence in their own organization, the authors' propose some broader frameworks for ethnographic impact and raise some questions for the EPIC community regarding business value, ethnographic identity, and organizational authority.

INTRODUCTION

We often describe our roles as ethnographers as 'sense-makers' – deciphering and isolating patterns of meaning within complex landscapes of people, things, places and the sociocultural dynamics that define our various interactions. In an applied business context, we believe our ability to "make sense" of our products/services, customers, or organizations offers adequate business value to justify the costs of our employment (Robinson, 1994). Over the past few years at EPIC we have engaged in various discussions about our roles as sense-makers in organizations, "who are we?", the approaches we take to sense-making, "how?", and the types of problems we try to make sense of, "why/what?". Here we want to examine the "so what?" or "why does this matter?" question about the work that we do – which is often the final analytic filter we apply to our data in order to extract applied value. When we hold a business lens of scrutiny up to ourselves, how do we fare? We want to have an open conversation about how we can trace – if not quite measure—our impacts, identify

the types of impacts we can have, and think critically about how we can grow them over time both as individuals and as a practice.

As a community of practitioners, we share ways in which we create impact within our organizations by leveraging our craft at building deep knowledge of people within the contexts of our applied foci. However, because we are scattered across a variety of contexts of practice—inclusive of consultancies, non-profits, private companies, government agencies and universities—we must take different approaches in turning that knowledge into a branded commodity that gets used to create value in our diverse organizational contexts. In this paper, we endeavor to reflexively assess our own failures and successes in creating business impact within the specifics of our own organizational context.

We begin by tracing the evolution of ethnographic practice within the specific landscape of expectation and perceived value of Microsoft, and identify factors that shaped the relative impacts of ethnographic projects. We then look at how we turned our analytic lens on our own roles in the organization, and applied our skills at opportunity analysis to create a strategic engagement model for ethnography within the Microsoft product development cycle and organizational terrain. As we have raised the stature of ethnography in our organization, we have seen an evolution of increasing impact of our work. While this propels us forward as a community of practice and individual professionals, we end by raising familiar but not yet deeply explored questions about the interplay between ethnographic identity and organizational authority. Our goal is to emerge with some frameworks of ethnographic impact that you can apply and stretch and enrich within your own contexts of practice. We believe that, as a community, we can mature our business effectiveness by working together to better define what it means for us to create impacts with our work, and anticipate the paths down which those impacts will take us.

SITUATING OUR OWN SENSE-MAKING

"Usability engineering has been an extremely influential approach to technology design. … Its philosophy of specify-design-test-redesign etc. is both action oriented and pragmatic."
(Dillon, 2000)
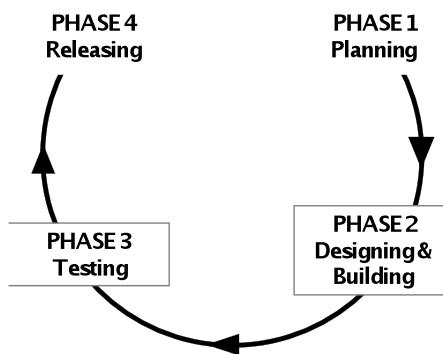
We begin with situating our own context of praxis, sharing some insights of the historical trajectory of research and ethnography within Microsoft and ways in which conceptions of research 'impact' have been viewed and measured here. Microsoft operates on a traditional software development cycle with four distinct phases: Phase I - Planning the Product, Phase II - Designing and Building the Product, Phase III - Testing the Product and Phase IV - Releasing the Product.

Research to guide the strategic direction of a product has traditionally fallen within marketing at Microsoft, which is focused on *selling* products rather than *building* products. Market research usually occurs during Phase I, when marketing conducts large quantitative

surveys to determine what the main goals of the product should be, assessing people's broad wants and needs or what drives them to buy, but not necessarily specific to how people use a product.

Diagram 1.0   PRODUCT DEVELOPMENT CYCLE

PHASE 4
Releasing

PHASE 1
Planning

PHASE 3
Testing

PHASE 2
Designing &
Building

Research within product development has its origins in Product Testing where Testers try to find potential problems with the software, commonly called 'bugs'. In the late 1980s the emerging field of usability was being embraced widely across the technology sector, most technology companies hiring usability engineers and investing in usability labs (Dumas, 2007). Across the industry, there was increasing awareness of the value of having target customers utilize the software in order to identify and 'fix' bugs so that products worked better but were also easier, more efficient and more pleasant to use (Nielsen, 1993). Within Microsoft the usability engineering cycle for product research is an iterative process, whereby software code is written, a usability engineer tests that code with 'users', issues are identified, implications for design are established and then the highest priority issues are addressed in the next update to the code. This has led to a specific model of impact for usability at Microsoft: to list the recommendations for changing a product, and to directly show where changes were successfully promoted and implemented in the shipped product. Hence, 'good' product research findings began to be defined as those that were the most concrete and 'actionable' (Diagram 1.1).

Diagram 1.1   LEGACY(USABILITY)MODEL OF IMPACT

Assess ⟶ Identify bugs ⟶ Change product

In relation to the product cycle, usability was initially employed during Phase III, to ensure there were no major problems before releasing a product. It was recognized, however, that starting product research at this time did not allow time to actually make changes to the product before it was released. This stymied a usability engineer's ability to make impact to the product. Therefore usability researchers began conducting studies earlier in the product cycle, in an attempt to catch user-interface difficulties earlier so that they could more effectively impact the product. Kent Sullivan, a Microsoft veteran who began his career at Microsoft in the late 1980s as a usability engineer, explains this process, "The history of usability is trying to row upstream. Water is flowing downstream as the product cycle is unfolding while we were trying to row backwards in time and figure out how to have impact earlier and earlier in that cycle."

As researchers began to be embedded in the product cycle earlier, team members began to ask questions of them that traditional usability methods did not well address: How are people using our products in the real world? Where do they use our products and why? How do these things differ market to market? While market research gave insight into some elements of these questions, like how many people used a particular product, or what people said were their desired improvements, it did not get to a granular level of how, where and why. Methodologically, both contextual inquiry and ethnography were explored to help fill the recognized gap. Contextual inquiry is still utilized as a method by many usability engineers today throughout the product cycle (Beyer & Holtzblatt, 1998). However, there was still a need for a more encompassing approach during Phase I, allowing for a broad perspective to help team members deeply understand, as well as connect with their target customers. Therefore, similar to *usability* researchers, a new type of practitioner with a strong sense of identity related to a method was brought into Microsoft product development, the *ethnographer*.

CONFRONTING LEGACY MODELS OF IMPACT

While there was an identified need for building deeper customer understanding, there was no identified model by which an ethnographer should integrate their work into existing structures and processes. Ethnographers have now been on staff across Microsoft for almost 10 years, numbering eight specialized practitioners across various product teams, three specialized practitioners within Microsoft Research, and a small handful that do not have the title of anthropologist or ethnographer, but view their ethnographic praxis as pivotal within their roles. While every large product team at Microsoft has usability engineers (a 200+ person community across the company), there are relatively few teams that choose to employ ethnographers (although some teams do hire consultancies to engage in ethnographic inquiry for them).

Through the years of having full time ethnographers, an extensive number of ethnographic investigations have been conducted covering a wide range of goals. Some of

these have been exemplar in building insights and creating widely recognized value. Some investments have had narrow, but significant, impact to lay a foundation for change. Other projects have been supported and loved by the ethnographic community, but have been disappointing in the minimal traction they gained.   So what has worked, what hasn't worked, and why?

Ethnographies That Had No Home

Looking back it is easy to see that our biggest failures were places where our work was 'good' in its own right, but outside the expected metrics. As researchers sitting within product development, we faced assumptions that our integration into the product cycle and our impact on the product would follow a similar trajectory as usability. But our work does not always conform to the model of impact that usability has forged. In his paper discussing the disconnect between ethnography and traditional HCI practices, Dourish points out a common response to ethnographic work: " ' it's all very interesting, but I don't understand its implications for design' " (Dourish 2006). For us, the least successful projects have been those that we liken to islands: pieces of research that in and of themselves are interesting and insightful, but fall outside the context of what is going on with the larger product team. As ethnographers projects like these are tantalizing for us, in their wide open prospects, as well as the chance to unveil strategic business opportunities that were otherwise unnoticed.   Our handicap in these cases has not been in the validity or quality of the research, but in varying degrees of success in situating the research within strategic business paradigms.

There are two reasons why particular projects have not been as successful as other ethnographic projects at Microsoft: 1) when a project does not appear to have direct relevance to the short or medium term business goals; 2) when there is no team already in place to act on data that we bring back from the field.

Too Far Outside the Product Cycle – It is common for ethnographic methods to be used to explore new opportunities, helping to determine whether an investment should be made. However, at Microsoft, when ethnographic projects are too far removed from the current product, it can make it difficult for our peers to find worth in the investment. In one series of investigations management was considering what it would mean to take a standardized global product and add elements to make it look at feel as if it were developed for a specific market. The ethnographers were tasked with exploring cultural nuance with this lens, while the rest of the product team was working on the next standardized version. Imagine the clash when two ethnographers give a presentation on how the computer is or is not relevant to the lives of middle income families in India to an audience that must return to their office and focus on building for US and Western European markets. While our management was looking at long-term strategic value, our colleagues did not necessarily understand how the project related to what they were doing *today*.

No Organizational Target – When we do uncover strategic business opportunities, it can be difficult to find someone who has the power to take immediate action on them. This is

different than our usability counterparts because they are mapped to a feature team and asked to provide direct feedback on a plan or product that has already been produced. New business opportunities often do not have a direct organizational target, nor people at the ready to implement the feedback. Due to the legacy model of impact we must show how our research impacts current products, therefore if there is no one within our own division ready to act on our recommendations, we have been forced into the uncomfortable position of selling our work to other divisions of Microsoft to show short-term value.

Ethnographies That Fit the Mold

Conversely, some areas where we have met great success have been projects that clearly fit within the phases of product development and the legacy model of impact: 1) providing a strong, clear connection to defined immediate or medium-term business goals; 2) providing feature-specific data from the field; and 3) evaluating products mid-stream and end-stream in the product cycle.

Fit into Near Term – A place that ethnographic work has been widely adopted and successful is in bringing deeper insight to customers and markets that have been defined as immediate or medium-term business targets. It is increasingly common for companies to invest in quantitative segmentations of their target customer base. These segmentations are expensive, and therefore senior leadership are invested in utilizing the data. However, the data is often overwhelming, making it difficult for people to use the information to help them focus. For us, ethnographic methods help to focus the quantitative data in many ways: understanding which of the statistics is the most relevant to differentiate segments, adding richness to help understand who these people really are and making the data digestible for engineers. Without a qualitative compliment, putting a face on a segment is a guessing game based on broad demographic breakouts. And more importantly, it is the story of a person that our colleagues remember – *Eva hits snooze every morning when her mobile phone's alarm goes off* – not that 19% of people use the alarm clock on their mobile phones every day. Our most used ethnographic data is immediately relevant to our colleagues and comes alive in their mind's eye in a way that statistical data does not.

However, the insights themselves have not been enough to ensure the ethnographic data will be adopted. Two pitfalls that have been experienced at Microsoft are having data intended to educate a product team on their target customer collected and released after the product cycle had already begun, thus missing the planning phase where team members are creating their vision of who they are designing for, and data being packaged in ways that were not memorable or consumable enough for product team members. Therefore to ensure success we have learned that it is necessary to collect our data during the end of one product cycle and have our insights and deliverables ready for consumption the day the new product cycle launches. Additionally, we have learned that our design colleagues are essential in helping us to create various ways to communicate the information that resonates with our internal audience.

Feature-Specific Data – Another way that ethnographic methods have been successful within the existing model of impact is to collect feature-specific data while in the field and provide that information to usability colleagues. This type of data can be collected within the scope of almost any project and does not need to be the focal point of the research. For example, within the course of an ethnographic deep dive with one customer segment, we are sure to include questions that our usability engineers have provided us such as 'how do you add a new contact to your mobile phone?'. This type of data may not naturally emerge during observation, but it is easy enough to have a set of feature-specific questions that we ask at a closing interview with our participants. We are still able to conduct broad investigation, while providing granular information that will assist our usability colleagues, add to the information about people's behaviors overall and molds to the existing model of impact. That being said, we are still learning how to most effectively package the raw data so that researchers can easily consume, utilize and repurpose the information.

Product Evaluation – Finally, the use of ethnographic methods to observe a soon-to-be-released product in the field to evaluate short-term improvements and gather requirements for the next version has been fully embraced at Microsoft. This has been successful because it has allowed a view into how people used the product 'in the wild' and the difficulties they encountered, which were often different than difficulties identified in the lab or by the testers. In addition, programs like these have made our customers really tangible for the development team and people delight in following along with the excitement and disappointment our products evoked. While there is tension that by the time we have a beta product it is at a point in the product cycle we may not have enough time to fix problems that are discovered before the product ships, the power of real people suffering through bad experiences puts tremendous weight behind these findings to be priorities. Evaluative work is an excellent opportunity to marry usability and field methods, allowing a close partnership with usability colleagues. The resulting data reveals short-term items to be fixed (adhering to usability metrics) and uncovers long term needs and goals of target users to help set up the next release.

In our tenure as practitioners at Microsoft we have been able to identify how ethnographic work can have the greatest impact. One of our biggest learnings has been that if we focus our efforts on single ethnographies that stand alone like islands, outside of the current foci of our product team, we cannot enjoy long term success. By evaluating our experiences and approaches over the years, we have learned how to get smarter about translating our findings to an engineering culture and situating some of our work within an existing impact model. Once we had gained these insights we realized we needed to find ways to promote our strengths and deep insights within the existing product cycle and engineering rhythm. We needed a new model of impact – and we needed to be able to sell it internally in such a way that its value would be widely recognized.

MAKING SENSE OF OUR STRENGTHS: ETHNOGRAPHY AND THE PRODUCT CYCLE

> "Ethnography provides insight into the organization of social settings... it provides models for thinking about those settings and the work that goes on there. The value of ethnography, then, is in the models it provides and the ways of thinking that it supports." (Dourish, 2006)

We are trained to look across fields of complexity and make sense of them for our audience. Midway through our journey of failures and successes across Microsoft, we began to more effectively apply our analytic lens on ourselves in order to identify opportunities for increasing our own impact. We began looking inwardly to the webs of business influence in which we were caught as much as we looked outwardly to the webs of customer complexity. We talked less about our methodology, and more about business goals. We branded ourselves based on our ability to decipher our target markets and deliver relevant insights, but we grew our brand by deciphering and strategically navigating our politicized organizations. We don't think any of this is unique within our community of praxis – we know many of you have done and are doing the same.

In our context of praxis, our approach to this has been oriented around the common conceptual model of the product development cycle combined with an honest analysis of models of power and influence within the corridors of Microsoft product teams (Lovejoy & Steele, 2008; Flynn, in press). Despite the bruises we earned in making ethnography relevant, we also recognized that we were uniquely positioned as research professionals within the corporate organizational landscape. Due to its strong engineering culture, the product teams, within which traditional engineering sits, are the loci of decision-making around product and business strategy and the primary axes of influence. Although ethnographic practice could live in our marketing teams or in Microsoft Research, an exclusive engineering research & development group looking 5+ years into the future, neither of these places offer the opportunity to have extensive product impact. Market researchers are viewed as providing a service function for delivering data to marketing, not product teams, and Microsoft Research does not have strong ties to product decision-making. By sitting within the product team, we believed we were appropriately positioned to carve out a niche of influence.
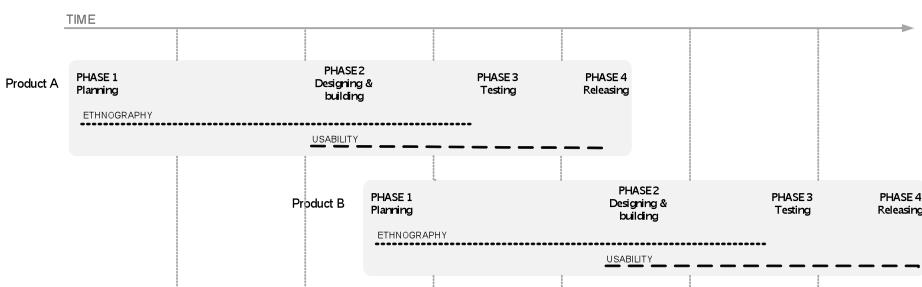
Earlier we discussed ways in which ethnographic research can maximize its success within the expected discourses of research and product development inside our company. Driven by our deeper understanding of these successes and the desire to do more strategic and insightful work that would have *direct product impact*, we decided we needed to carve a new type of discourse into the organization. Our challenge was to introduce a holistic research lens, encompassing, but not limited to ethnographic inquiry, into a research landscape that was dually defined by usability on one side and market research on the other – and to introduce it in such a way to gain credibility of both colleagues and leadership.

We recognized the need to closely tie our value to the dominant paradigm of the product cycle. The research that our marketing teams executed tended to be front-loaded - mapping out broad landscapes of markets, segmentations, and competitors to support early product planning. Conversely, our usability colleagues maintained a narrow focus on product features, iterating and validating towards the middle and end of the product cycle. We saw a gap and an opportunity – to train our lens on the *people* who are embedded within and yet obliquely obscured by portraits of broad market landscapes or a narrow focus on features. While the product team and our usability colleagues were heads-down in the lab deep into the product cycle, we could be out in the world building knowledge to guide the team through the front edge of the next product cycle – and partnering with our market research colleagues to bring some design specificity to the broad opportunities that they were identifying. We launched our own Strategy Team within the User Experience discipline, framed our mandate around building knowledge of target customers and product opportunities 12 – 36 months ahead of the core product team, and translating market data into the language of users, experiences, scenarios, tasks, and features as spoken by the product team and executives (Diagram 1.2). Our UX Strategy team consisted of two ethnographers (the authors) and one usability engineer – the ethnographers driving the field research and the usability engineer creating tools and processes to appropriately insert ethnographic insights throughout the product cycle.

Diagram 1.2   SCOPE OF ENGAGEMENT ACROSS THE PRODUCT CYCLE

We found the sweet spot for ethnographic impact within our world. We produced insights that simultaneously had direct product impact to our engineering partners and that pushed the boundaries of our corporate assumptions. Through careful planning, strategic project prioritization, deliberate partnership development and our craft of developing and delivering customer, product, and business insights with a strong dose of storytelling, we soon had the ears of the top executives for the product division. We waved flags of missed opportunities and rich target markets that our business couldn't ignore, and enjoyed repeated success in pushing the front-edge of critical waves of change that gained divisional momentum and transformed our business priorities. We became the go-to team for customer-focused decisions, discussions, or questions for teams and executives. We were also able to take ethnography to new places inside Microsoft – moving beyond the role of

knowledge expert and opening the door to the boardroom to take a seat beside our engineering counterparts in making decisions about our product and business strategy.
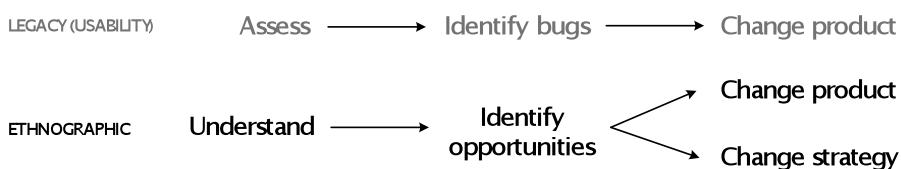
More recently a number of developments have come together to help us further evolve and move towards a more integrated product research discipline with our usability partners. As the first 'ethnographer' to lead and manage an entire user research team at Microsoft, and with executive support to create a more holistic practice, Donna has been empowered to drive a vision of end-to-end research across a product cycle. Strategic researchers and usability researchers are identifying new ways to stretch themselves from the front-end of design planning to the tail-end of product testing without losing the value of their specific lenses, and to further interweave their approaches to bring value across the entire product cycle.

MAPPING OUR SENSE-MAKING JOURNEY: A TAXONOMY OF ETHNOGRAPHIC IMPACT

In this journey of making sense of our strengths within our context of praxis, we were able to break through a new ceiling of influence as ethnographers within Microsoft. We delivered clear value in aligning customer understanding with product strategy, created a strong brand for our team, and became widely recognized as thought leaders in user experience. We no longer felt we were swimming against a strong tide in convincing colleagues about the value of our approach, or even about how it fits into our processes. In referencing our work in an internal video, our Corporate Vice President claimed "Never before have we understood our market data as deeply as we do now."

These achievements also helped define a new, accepted model of impact for product research practices inside our organization. In addition to the legacy usability paradigm of impact, an ethnographic paradigm of impact has been established in its own right (Diagram 1.3).
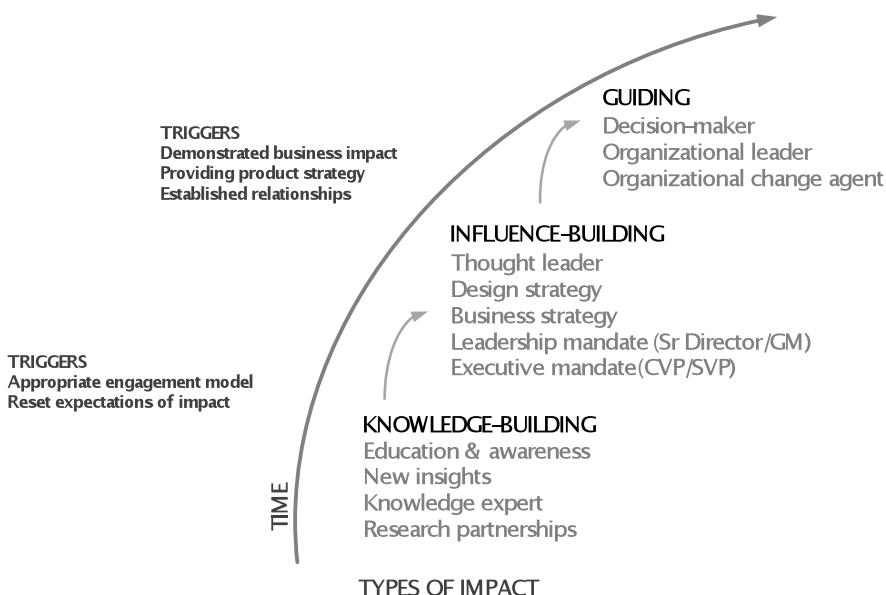
Diagram 1.3   DUAL MODELS OF IMPACT

Through this exercise of mapping our own sense-making journey, we have identified clear stages in an arc of ethnographic impact within our organization (Diagram 1.4).

Climbing this arc has been a process of gaining visibility and credibility across our teams – both for ethnography as a practice and for us as individuals.   For the arc as individual growth, what do we need to do to more efficiently move practitioners up the trajectory? From an organizational perspective, a mature practice will have individuals embedded across all of these stages in the organization, providing both entries and growth paths for the next generation of leadership.

Diagram 1.4   ARC OF ETHNOGRAPHIC IMPACT

TRIGGERS
Demonstrated business impact
Providing product strategy
Established relationships

GUIDING
Decision–maker
Organizational leader
Organizational change agent

INFLUENCE–BUILDING
Thought leader
Design strategy
Business strategy
Leadership mandate (Sr Director/GM)
Executive mandate(CVP/SVP)

TRIGGERS
Appropriate engagement model
Reset expectations of impact

KNOWLEDGE–BUILDING
Education & awareness
New insights
Knowledge expert
Research partnerships

TIME

TYPES OF IMPACT

For the arc as practice growth, finding the appropriate way to engage in the dominant paradigms and redefining expectations of value were necessary triggers for moving to a new level of increased influence. The potential for ethnographic authority was established by changing the order of things. At Microsoft, this has taken a number of years and there is also a vast organizational horizon – even though we have redefined models of impact for our own division of 2500+ people, how do we effectively scale or extend across the company of 75,000 people?   Will it be easier for the next team who attempts the same, or do we find ourselves continually starting at the bottom of the arc in our quest for ethnographic authority? Also, our arc of impact is situated within our business context. How do the arcs differ for those of you in consultancies or government organizations? Our biggest challenge as practitioners is to redefine perceived value beyond our immediate contexts of praxis – across our corporate terrains and across the business landscape—and

collectively move towards a replicable model that will help us define our lasting place in the order of things.

MORE SENSE TO MAKE: FURTHER QUESTIONS

We want to end this conversation with more questions than answers.   As we climb the arc of impact, how does our identity change – as individuals and as a practice? Our individual public identities have evolved as our roles have grown. One outcome of our success at growing organizational integration, executive mandate, and strategic influence of ethnography is increasing recognition as leaders and managers. In turn, we find ourselves leading researchers (and designers) of all stripes, have moved further away from our everyday identity as 'ethnographers,' and reduced the frequency of our research cycles. In many ways, our ethnographic lens has provided a natural path towards leadership – enabling our strategic perspectives and ability to see the big picture complexity of both customers and our organization. But does our identity as ethnographers also pose a glass ceiling in our organizational context, and constrain our ability to move into higher leadership positions by compartmentalizing our capabilities in the eyes of executives?

We are also now seeing a wave of 'holism' slowly sweep across other teams and practices within Microsoft, with usability researchers claiming the 'field' as one of their arenas of research.   Is our relative value thus more about building a vision for end-to-end strategic research that is often born from an ethnographer's holistic perspective and training? Will these trends threaten our authority over our historical domain, or are we witnessing a trend that will embed ethnography even more fully into hegemonic structures?

REFERENCES

Beyer, H., & Holtzblatt, K.
1998   Contextual design: Defining customer-centered systems. San Francisco, CA:
         Morgan Kaufmann Publishers.

Blomberg, J., Burrell, M. & Guest, G
2003   An ethnographic approach to design. The Human-Computer Interaction
         Handbook, eds Jacko, J.L. & Sears, A., 964-985. Lawrence Erlbaum Associates:
         New Jersey.

Dillon, Andrew
2000   Group dynamics meet cognition: combining socio-technical concepts and usability
         engineering in the design of information systems, in: E. Coakes,. (et al) (Eds.) The
         New Socio Tech: Graffitti on the Long Wall. London: Springer-Verlag, 2000,
         pp119-126.

Dourish, Paul

2006   Implications for Design. Computer Human Interaction, Montreal, Quebec, Canada.

Dumas, Joe
2007   The great leap forward: The birth of the usability profession (1988-1993), The Journal of Usability Studies, Vol. 2, Issue 2, February 2007, pp. 54-60.

Flynn, Donna
In Press My Customers are Different!: Identity, Difference, and the Political Economy of Design. In Ethnography and the Corporate Encounter: Reflections on Research In and Of Corporations. M. Cefkin, ed. New York, Oxford: Berghahn Books.

Lovejoy, Tracey and Nelle Steele
2008   Effectiveness through Partnerships. In Partnering for Organizational Performance, Elizabeth K. Briody and Robert T. Trotter, II, eds., Lanham, MD: Rowman and Littlefield Publishers, Inc.

Nielsen, Jakob
1993   Usability Engineering. Academic Press, Boston.

Roberts, Simon
2006   The Pure and the Impure? Reflections on Applying Anthropology and Doing Ethnography. In Applications in Anthropology: Professional Anthropology in the Twenty-first Century. S. Pink, ed. Pp. 72-89. Studies in Applied Anthropology. New York, Oxford: Berghahn Books.

Robinson, Rick E.
1994   Making Sense of Making Sense; Frameworks and Organizational Perception. Design Management Journal, Winter 1994.

Sherry, John
2002   Foreword: Ethnography, Design, and Customer Experience: An Anthropologist's Sense of It All, Squires, Sue and Bryan Byrne, eds., Creating breakthrough ideas. Westport: Bergin Garvey.

Sunderland, Patricia L and Rita M Denny
2007   Doing Anthropology in Consumer Research, Left Coast Press

Now You See It, Now You Don't: Ethnography and Selective Visibility in the Technology Sector

LAURA GRANKA
PATRICK LARVIE
JENS RIEGELSBERGER
Google, Inc.

As ethnographers practicing within an engineering driven industry, we often struggle with visibility and its effects. Exposing the methodological and technical underpinnings of ethnographic practice can bring us closer to the teams we work with, but it can also draw attention to the ways that engineering and anthropology clash. In this brief paper we describe the rationale for deliberate and highly selective visibility in our engineering-driven workplace. We will draw on our experience as anthropologists "embedded" in teams of engineers to discuss our own claims to authority and examine how legitimacy is conferred upon ideas and actions in a technology-driven environment.

SELECTIVE VISBILITY IN THREE PARTS

For the purposes of this brief paper, we will presume that there is some general agreement that anthropology brings value to the process of creating new technologies, even if the understanding of that value varies considerably from one person or company to the next. Here, we would like to focus on a few key aspects of how we perceive our contributions as ethnographers to be understood and valued – both positively and otherwise - based on our experience of work within a very technology-centric industry. Initially, we examine the moments that make us stand out positively as ethnographers who make concrete contributions to our teams and companies. In the second part, we'll talk about how those moments give way to situations in which our backgrounds and roles may be the source of some unease, as the tensions between a social science focusing on culture, an engineering-led company, and business goals may begin to clash. Finally, we take these points of disjunction as important opportunities for reflection about ourselves as ethnographers and the positions we occupy within our industry. As we will argue, the contours of ethnography's perceived value – and its limits – may point to ways to improve our practice of the discipline in technology-driven environments.

1: We're ready for our close-up: ethnographers as brokers of the real

As a start, we'll describe some of the situations where drawing attention to the technical aspects of ethnographic practice has a distinctly positive valence in our workplace. By "positive," we mean having the effect of integrating us into the teams we work with because our contributions are seen as positive for the projects we work on, for the teams we work

for and for the company we have in common. These are moments when our role as ethnographers is both distinctive and positive, worthy of calling out in technical detail, and can be distinguished from others we'll discuss later in this paper. These are times when our identities as anthropologists, researchers, or social scientists are seen as being related in positive ways to the production of people-centered technology and, most importantly, to the innovation that is widely taken to be the lifeblood of the industry that employs us.

In our experience, there is no better time to be an ethnographer in a technology company than during a field visit when our more technically oriented team members meet and observe – often for the first time – the people who are the intended users of the technologies we create. As ethnographers, we are often the first to arrange such introductions since we are the ones who set up field visits, train colleagues to carry out observations, facilitate the creation of artifacts to share with our teams. In many instances, we are unique on our teams in that we're charged with actively encouraging field visits for team members who may have never actually met anyone who uses their products outside the confines of the company's offices. We deliberately and consciously put team members into strange and sometimes uncomfortable situations. The strangeness and discomfort are not random, they are studied and carefully calibrated to highlight the ways we perceive our public of technology consumers as distinct from the group of technology creators we work with in our everyday lives. While much of the empirical research we do allows the opportunity to see people hammer on our technical products in ways that allow us to see room for improvement, fieldwork is unique in offering an immersive experience that, in comparison to laboratory sessions or interviews, is an opportunity for truly creative disruption of the assumptions we make about the relationship between people and technology. It is this disruption that allows our teams to identify and empathize with "real people" and "real world" contexts of use. In our arsenal of techniques, participatory field research has high firepower for its ability to get people to see things in new ways. While it may have many other limitations, its ability to achieve high impact on our teams makes it the technique of choice at the beginning of a high-profile project.

This is one of the moments when we actively stage the technical underpinnings of ethnography. We put together often complex research protocols involving diaries, field visits, interviews, observations and even laboratory sessions in which people do all kinds of things to our products that we never imagined possible. We develop matrices to describe our sample and protocols for analyzing the data. These tools communicate not just our technical abilities but also our understanding of the need to craft research that will serve the underlying purpose of the exercise: meaningful innovations for the people who consume and often transform the technologies we create. We discuss each aspect of research, orchestrating debate about the consequences of our methodological and analytical choices. We produce artifacts from our research that serve to remind our team members of the relative strangeness of our users. Images, words and other artifacts from our visits with "real" help remind us of just how different technology users and creators can be.

At this moment, our message as researchers is clear: through the disciplined practice of ethnography, we can systematically examine assumptions about technology to expose gaps in our knowledge and to see opportunities for innovation. We expose our teams to the technical aspects of research through discussions about sampling, method and analysis. We train non-specialists to observe and record field observations (and, perhaps more importantly, about how not to do such things) and provide a frame for the analysis of data collected. When this phase of research is finalized, the experience of the team and the analysis of the data bear the indelible stamp of the ethnographers who engineered it. When successful, the research experience becomes a powerful reinforcement of what is positive about our identity as anthropologists; we are able to show clearly how and what we contribute to our teams and we can do so in terms that are decidedly technical in nature, grounded in social science theory.

What are the parameters of this value and what do they say about our role on teams? One of the ways that these situations achieve value is through a process of defamiliarization (e.g. Bell, Blythe, & Sengers, 2005). Mundane assumptions suddenly become the object of scrutiny, revision and creative transformation. New and creative ideas occur precisely where we see the gaps between what we thought we knew and what we see when we observe "real people" in the "real world." This is clearly one of the ways that ethnographic practice is tied to innovation, and has been well described and documented by our colleagues (Bell, et al., 2005; Smith & Lewi, 2007). This aspect of positive value and visibility is tied to our roles as brokers of the real, one of the staples of discussions about the role of anthropologists in the representations cultural systems. Whatever the complications of this role – which are both real and numerous – the value it has for us and for the people we work with is tangible and pragmatic. We are able to engineer situations that allow our teams to see opportunities for meaningful innovation, an important currency for status within the domain of the Silicon Alleys, Valleys and Glens of the world.

There is another important valence to the value ascribed to the role of ethnographer in this very temporally bound and highly specific instance. We see this aspect of our value deriving from the affective impact of our work, which changes not just what people think about the relationship between people and technology, but how they feel about that relationship. This change in affect is more than a byproduct of a well-engineered research project. Based on our experience, we believe it is a vital aspect of our contribution to our teams in an applied setting, without which we would be considerably handicapped in our efforts to attain legitimacy and visibility in the environments in which we work.

It is not uncommon for us to witness a substantial change in our team members as a result of the encounters we engineer with the "real" world outside of our workplace. When research efforts are successful, team members might see their work in entirely new ways, with the research experience itself providing a marker for a "before and after" way of seeing technology. Those so transformed often go on to see themselves as "evangelists" for user-centered methods, often trying to convince their co-workers of the benefits of observing technology users in "real world" situations. It is no coincidence that, in later stages of a

project, we might come to see these people as among our main allies on the team. In this sense, we're not just engineering opportunities to see the gap between what we believe to be true and what we can learn by observing what our intended users do with the stuff we make. We're also engineering situations that will lead people to have strong, emotional convictions to beliefs about what the path to innovation should look like.

It is important to remember that this moment we're describing as one of positive visibility for ethnographers often occurs in the early stages of a project, when new ideas are put forth and teams make initial choices about the ideas they will champion and those they will abandon. The emotional charge that ideas carry in this phase of a project is not trivial. To the contrary, someone who feels strong convictions about a concept is more likely to shepherd it through to later stages of development. As ethnographers, the ability to engineer a research situation that will result in a "conversion experience" is vitally important to the value ascribed to the discipline in later phases of project development. While our roles as brokers of the real is tied in some fairly straightforward ways to innovation, our ability to help team members feel that they see their work in new ways is vitally important to creating innovations that will eventually see the light of day.

Toward what we hope will be some productive speculation about how anthropology operates as an outsider discipline in applied settings, we posit a few elements as essential to this affective transformation. First, there is a sense of surprise or revelation, leading to a sense of disjuncture, or a before-and-after way of seeing previously held ideas about technology users and innovation. This sense of disjuncture leads to a sense that prior ideas may have been false or misinformed. If we've done our jobs well, there should also be an identification with the researcher and with the technology user as legitimate interlocutors in the process of innovation. Notably, the acceptance of our legitimacy in the process of technology creation occurs at the same time as the acceptance of the user.

To some degree, the successful practice of our discipline is related to technical skills that are core to the discipline of anthropology. The ability to create a sense of identification with those who are the users of technology certainly speaks to one of the humanist principles of anthropology, even as it suggests our ability to put together persuasive research plans. If our fellow technologists identify with us as researchers, we are successful in demonstrating our credentials as scientists in a way that is convincing. In both of these instances, our success depends upon our ability to communicate aspects of our technical expertise in ways that largely identify with our teams as members of a common family of believers in science, especially if we emphasize our commonalities rather than our points of disagreement.

But in some ways this moment of success and visibility as ethnographers is related to our ability to successfully stage the research experience and enhance its impact on our teams. The surprise, the sense of "before and after" and the ongoing sense of transformation are not unlike the experience of magic, also a highly emotional experience dependent upon identification with the performer and the experience of disjuncture. The relationship of magic to technology has been fruitfully analyzed in the context of users' delight with novelty

Selective visibility and the practice of ethnography

and utility (Smith & Lewi, 2007), focusing our attention on artifice and surprise as key contributors to the success of household technologies. In sociology and anthropology, theater and magic have been shown to be essential elements of "scientific" disciplines including clinical medicine (Goffman, 1959; Goffman, 1963). We would like to extend these analyses to the practice of ethnography in applied technological settings. Given the importance of affect and staging in our work, we cannot help but understand the performative aspects of our role as vital to our success in applied technology settings. And, as one might expect, this aspect of our job performance is also an important contributor to the moments in which we are – or would like to be – less visible as ethnographers.

2: The hazards of the spotlight: when being an ethnographer isn't so great

The contours of our contributions that have been recognized as valuable by the teams we work with also point to the ways that our role as ethnographers can be called into question. Our role as brokers of access to "real" can mark us in ambivalent ways, potentially exposing the disjunctions between anthropology and the other disciplinary knowledge present in the workplace. While contact with users may inspire creativity and innovation, the idea that non-experts might be legitimate interlocutors in the process of developing technology may well clash with the ethos of engineering. The identification of the "real" and the importance of affect in the attribution of value to our research may also set us up for conflict as we may unwittingly surface disjunctions between ethnographic method and business planning. Finally, the importance of performance and artifice in the execution of successful ethnography may in itself pose hazards to our own ability to identify real opportunities for technological innovation, one of the primary currencies for our success in our chosen industries. In seeking to create situations that will lead to creative defamiliarization, we may unwittingly overemphasize the spectacular in detriment of the ordinary or mundane ways that technologies fail to meet the needs of real users.

First, exposure to "real" contexts and people posits that they are legitimate interlocutors in the development of technology. While many of the "real people" we may have contacted are in fact themselves creators of technology or experts in fields outside the sphere of "coding", this position is potentially still at odds with one of the primary tenets of engineering: that a studied and expert application of science to known problems will lead to improvements ("progress" in more optimistic times that have long since gone). While we are often focused on engineering as a technique for making things, we may forget that the discipline has its philosophical roots in a modernizing ethos that juxtaposes the expert against the naïve, and reinforces the social division between creators and consumers of technology (e.g. Holston 1989).

If ethnography's function is to identify unmet needs and point to a path toward productive innovation, engineering is focused on the creation of tools to bring about innovation through increased efficiency or productivity. As colleagues, the engineers we work with are often judged on their abilities to do such things as ship code that meets given

standards and timelines, create features that are compatible with existing technologies and – not unimportantly – dazzle their colleagues with their technical skills. As ethnographers we rely heavily (though not exclusively) on specific, highly transformative experiences to point the way toward innovation. In contrast, engineering tends to evaluate itself in terms that emphasize the scale of reach and the numbers of uses/users engaging with a given technology. In an engineering worldview the mark of successful innovation is in the number of users adopting a product; for an ethnographer it may first be in how the innovation fulfills needs and transforms experiences. While both perspectives may be aligned in long-term goals, differences along the path to innovation are likely to surface as instances of mutual incomprehension.

When and how do these disciplinary disjunctures appear? While there are many moments when we can identify clashes between the disciplines on a team, there are two clear moments when there is a decided advantage to being an engineer and a clear disadvantage to being an ethnographer. Situations calling for prototyping can be among the most difficult for ethnographers. While many on the research staff can and do prototype their work, the ability to translate an opportunity to innovate into a thing that is recognizable as what that innovation might be is a key one on the team, and is one that is highly esteemed in a technological environment. While as ethnographers we might be brokers of "real" experiences with "real people", the technical skills involved in doing so do not necessarily qualify us to be considered "real" technologists. When it comes to fleshing out how a technological innovation might actually look or function, a divide appears between ethnographers as "experience brokers" and engineers as people who can "make things." Not only do they make things, but the prototyping techniques they often use provide the elements of magical performance about what innovation is and what it should look like that we often cannot match. While our leverage as ethnographers may have to do with our ability to broker the "real" through research, our engineering colleagues leverage their equally performative ability to render the real through code.

It is at this moment that our visibility – and the value of our contributions to teams – can be called into question. Much as the technical details of ethnographic research are complex and require explanation and even debate, the specifics of producing a technological innovation are equally complicated. But so long as these specifics are opaque to ethnographers, we are effectively excluded from any debate about them. Their magical qualities are proportionally greater since the codes they write in are largely exclusive to the realm of engineering. Once excluded from discussions about what the specifics of an innovation might look like, our authority and legitimacy as technology creators can be questioned. Who should determine the specifics of an innovation – the things it will and won't do, the systems it will and won't work with, the level of complexity that it will have and the type of user it will target? In our experience, when these are the questions being posed, our legitimacy as creators of technology is called into question. How can we talk about specifics if we don't understand the capabilities and limitations of the tools for the creation of technology? If we can't code, are we really qualified to debate the specifics of a technological product? Too often, we are thought of much as the people we introduce our

teams to – as people who stand in as opportunities to rethink some of the concepts related to technology, but not as legitimate creators of that technology. In this example, the "real" corresponds to the "naïve", or the consumer of technology rather than the creators. The "real" we broker may end up rubbing off on us, effectively turning is into "naïve consumers" rather than creators of technology. This is consistent with our experience of being called on to be the "voice of the user" when it comes to evaluating things that others have previously created without asking our input or opinion.

This is not the only moment in which our visibility as brokers and interpreters of the "real" can expose significant disjuncture. When we put together our technically savvy research plan, debate with our teams about the pros and cons of specific strategies and finally arrive at a plan that will expose us to the right kind of "real user", are we sure that our legitimacy as brokers of the "real" will be recognized across the company? What appears to us to be technically well-founded sampling, ensuring that we are exposed to the right kinds of situations in which to ground our search for innovation might appear to others in our applied settings as remarkably similar to, for example, a business plan or a marketing strategy. While we may go to some length to include product and business strategists in our research planning, we may still witness competing claims to what counts as "real" for the purposes of determining the specifics of a plan that involves creating and launching what might count as an innovation. Consistently, we run into clashes, large and small, between the idea of research from the perspective of design innovation and from the perspective of business planners. When we suggest that we look at users who are "on the edge", for instance, we generally mean that the user in question is placing some demand on a technology that is unusual or somehow potentially instructive for a design team. When business planners think of "the edge" they may think very differently – as uses who might be tempted to use a rival technology or a work-around. While these groups often overlap, there are times when they do not. For the purposes of design research, looking at very different groups in very different contexts might be the right thing to do. From a marketing or business planning perspective, this might mean looking at users in two countries where the product is "winning" and "losing" that, for us, are virtually identical from our point of view.

What, precisely, might the boundary be between ethnographic sampling and business planning? In our experience, this is another example of a moment when our visibility on teams can diminish as our legitimacy as technology creators is questioned. As with engineers, our claims to be legitimate interlocutors can be called into question by those whose role is to plan launches of product in a way that is consistent with business goals. What is "real" for the purposes of an ethnographic research project may not count as "real" for the purpose of business planning in an industry that must remain profitable. Like the disjuncture with engineers, this potential clash over the meanings of the "real" with business planners can be a moment when we not only have less visibility, but when we purposely seek out a less noticeable role in decision making, even when doing so means that we may have an increasingly tenuous relationship between a given insight and the actual product that ends up shipping to consumers. We tend to shy away from these situations precisely because we feel

unsure about our grasp of the skills required to tie our research methods to business outcomes.

Finally, there is one last moment of diminished visibility worthy of discussion precisely because we as ethnographers are the ones who shy from a spotlight we might otherwise seek. As brokers of the "real" we also put ourselves into a context in which what counts for us as "real" are the experiences that translate into innovations that later ship as product and are used by real people – preferably many of them. Given our dependence on team members, and the relatively greater value of highly transformative experiences over relatively subtle shifts in thinking, we find ourselves facing what may be something of a conundrum. If it takes major shifts in thinking to produce the kinds of innovations for which we will be credited, are we then less likely to focus on the mundane, everyday failures of technology that also might show us opportunities for new and better stuff? As research in development has morphed into research-as-development, smaller, more subtle shifts in thinking over time are more difficult to trace back to researchers. Our contributions need to be splashy, memorable and actionable in the very short term. It is in this context that we have come to see "extreme" or "edge" not just as key components of an ethnographic sample, but as essential elements to the kind of design inspiration we need to be appreciated by our colleagues.

These shifts are also changes in the way time and affect factor into the way research is done and to some degree reshape what researchers have to do to remain relevant in technology-focused industries. As in the previously discussed moments when our visibility and authority are diminished because of the disjunctures between our work and that of our colleagues, when we emphasize high impact, affective change we are responding to a workplace context that demands that our work generate high-impact findings that are actionable in the short term. But there is also a difference here in that we are rendered relatively less visible as ethnographers because in part, we suspect that some part of our work might lie outside the boundaries of legitimate anthropological practice. In other words, we may well suspect that the theatrics of ethnography required to be effective in the workplace may locate us as ethnographers outside of the boundaries of "decent" anthropology. Much like in Goffman's (1963) studies of people with "spoiled" identities, we find ourselves as outsiders to multiple groups to which we might once have belonged: team members, company business planners and even our own disciplinary colleagues.

3. Taking a bow: who gets the applause?

When it comes time to take and distribute credit within our teams, where do we stand as ethnographers? How does our variable visibility impact our relationship to the symbolic and material economies of the technology sector? Especially since the moment of impact and visibility that we describe in this paper occurs at the start of the project, our overall impact on the team and the company appears to be increasingly diluted as things move forward.

How might we assess how we're doing as ethnographers, or even put forward some ambitions for how we'd like to do?

Understanding our place within our industry, our company, our teams and our profession is important for many reasons. For those trained in ethnography, this is a tool of our trade; although such reflections have in fact become somewhat cliché, they speak to a canonical genre of literature. Discussions of place, position and visibility are in many ways constitutive of our professional identities. How can we leverage the insights we've gleaned from years of ethnographic practice within an engineering focused context to increase not only our visibility as researchers, but our overall efficacy as technology creators? We have a few thoughts, mostly grounded, as one might suspect, in the principles of our own discipline.

If our influence is partially related to our ability to "pass" as technologists, is it not also true that adopting the language, behavior and even values of our technologist colleagues might be a sign of our success? We argue that this is the case, at least some of the time, and that we might do well to pursue greater integration with our technologist colleagues. Should we not learn the language and logic of the business side of our companies? Should we shy away from discussions about how our methods relate to business strategy? Perhaps markers of our own success might include our ability to pass not only as legitimate creators of technology, but as colleagues who understand and are capable of shaping business goals.

First, we need to be better translators – translating not just user needs for the engineering world, but vice-versa; becoming literate and conversant in technologies and their capabilities and limitations may be just as important as being able to move from observation of the "naïve" to opportunities for innovation. Further, becoming much more conversant in the idiom of quantitative metrics may enable us to speak persuasively to audiences that are key to us, even if that requires a mastery of a different sort of theatrics. We also need to be better organizational ethnographers – identifying, anticipating and acting upon the potential disjunctures between our own disciplines and those of engineers and business planners. This also entails understanding more of the currency of our own industry: technical prowess, ambition, transit in and around the company. While we may not want to exhibit all of these traits, certainly understanding them will help us not just be more visible, but be more effective.

NOTE
This paper reflects the views of the authors, and may not represent the official position of the employer.

REFERENCES
Bell, G., Blythe, M., Gaver, B., Sengers, P., and Wright, R.
2003   Designing culturally situated technologies for the home. *Extended Abstracts of CHI 2003*, 1062-1063.

Bell, G., Blythe, M., and Sengers, P.
2005   Making by making strange: defmailiarization and the design of domestic technologies. *ACM Transactions on Computer-Human Interaction, 12 (2),* 149-173.

Bell, G. and Dourish, P.
2007   Yesterday?s tomorrows: Notes on ubiquitous computings dominant vision. *Personal and ubiquitous computing, 11,* 133-143.

During, S.
2002   *Modern enchantments: the cultural power of secular magic.* Cambridge: MIT Press.

Goffman, I.
1959   *The presentation of self in everyday life.* New York: Doubleday Press.

Goffman, I.
1963   *Stigma: notes on the management of social identity.* New York: Doubleday Press.

Holston, J.
1989   *The modernist city.* Chicago: The University of Chicago Press.

Kronthal, M.
2003   Customer portal research and design. *Proceedings of DUX 2003,* 1-4.

Lewi, H. and Smith, W
2007   Trivial technologies of effect in the home. *Proceedings of Association of Architecture Schools Australasia Conference 2007.* http://hdl.handle.net/2100/480, accessed 13 September 2008.

McCarthy, J., Wright, P., Wallace, J., and Dearden, A.
2006   The experience of enchangment in human-computer interaction. *Personal and ubiquitous computing, 10,* 369-378.

Salvador, T., Bell, G., and Anderson, K.
1999   Design ethnography. *Design management journal, 10 (4)*, 35-41.

Seizer, S.
 1993   *Stigmas of the Tamil stage: an ethnography of special drama artists in South India.* Durham: Duke University Press.

Smith, W. and Lewi, H.
2007   *Magical Beginnings of the Mundane.* http://ww.mundanetechnologies.com/goings-on/workshop/melbourne/papers/SmithLewi.pdf, accessed 13 September 2008

Sustaining Stories: The Versatile Life of Sustained, In-house, Ethnographic Practice in a Global Software Company

NATALIE D. HANSON
JOHANN W. SARMIENTO-KLAPPER
SAP Global Business Operations

Ethnographers, in a sense, play the role of story creators, storytellers, and, often, preservers of such stories. The narratives produced and the fieldwork from which they emerge make visible trajectories of practice—for both subjects and researchers— which can be traced both retrospectively and projectively. For "in-house" ethnographers engaged in the sustained work of making sense of and contributing to organizations, a unique challenge emerges: discovering and managing the retrospective and prospective meaning of their storytelling and its visibility. Here we reflect on the challenges and opportunities of sustaining ethnographic inquiry in a large global software company. Reflecting on close to ten years of participant observation, we outline some of our practices related to positioning, re-framing, and expanding the visibility of our work and our organizational roles; a dynamic that continues to shape our practice and its relevance within this corporate environment.

INTRODUCTION

In the last decade, applied ethnographic practice has made significant contributions to product and service design, program evaluation, overall strategy (e.g. Luff, 2000), and other organizational practices. In addition to extending the usefulness of the ethnographic method, these practices have also brought to light new methodological and ethical dilemmas (Fetterman, 1998). In this paper, we concentrate on the unique challenges that emerge from the sustained participation of ethnographers in organizational life as "in-house" social scientists and, in particular, on the practices related to managing the visibility of field data, interpretation practices, artifacts, and the researchers' roles themselves. We have come to believe that new methods and approaches might be necessary in this area based on the ways that our ongoing and complex relationships with sponsors, stakeholders, and subjects constantly challenge us to actively monitor the retrospective and prospective meaning of our work and its visibility. In considering the visibility of field data and of our roles retrospectively we engage in "sense discovery" or "sense making" by segmenting, associating and synthesizing elements of the research participant's experience as well as our own. Prospective visibility challenges us to engage in "sense projecting" or envisioning possible futures within the boundaries of a context of study as well as for ourselves. Before exploring some of these challenges and the ways we have come to understand and approach them, we outline the ways in which both of authors have come to our current organization, as well as what informs our views on this topic. In the spirit of reflective ethnography we report on our experiences, in an attempt to engage in a dialog with other practitioners regarding the pervasiveness of these situations and the need for collective thinking on ways to approach them.

Although almost all of the activities reported in the remaining sections correspond to the history of Natalie's professional practice at SAP, in many cases we will adopt the plural form for narrative convenience as well as aid in the reading of our accounts as practices that could be of value to others. Natalie came to the organization about ten years ago into a technical position while working on her Anthropology doctorate. In the intervening years, Natalie has moved into a management role and formed a small User Experience team. That team has grown to include interaction designers, information architects, and most recently Human Factors expertise. Johann recently joined the User Experience team after completing his dissertation work in Human-computer Interaction in a different context.

SAP is a large software company with offices throughout the world.[1] While the company does provide software-related services like consulting and training, the majority of the its revenue is delivered through license sales of its numerous software solutions. The software industry is a dynamic one, and its volatile nature in turn affects how companies are required to operate. In the past decade, SAP has become a publicly-traded company and undergone severl strategic alignments including a significant number of mergers and acquisitions by SAP as well as by its competitors. With company sizes and revenues soaring, analysts have focused increasingly on the profitability of SAP and its peers. In turn, there has been a growing interest internally on managing margins, and operations functions have rapidly appeared across the company, emerging as a new form of concentrated expertise to address this new corporate priority.
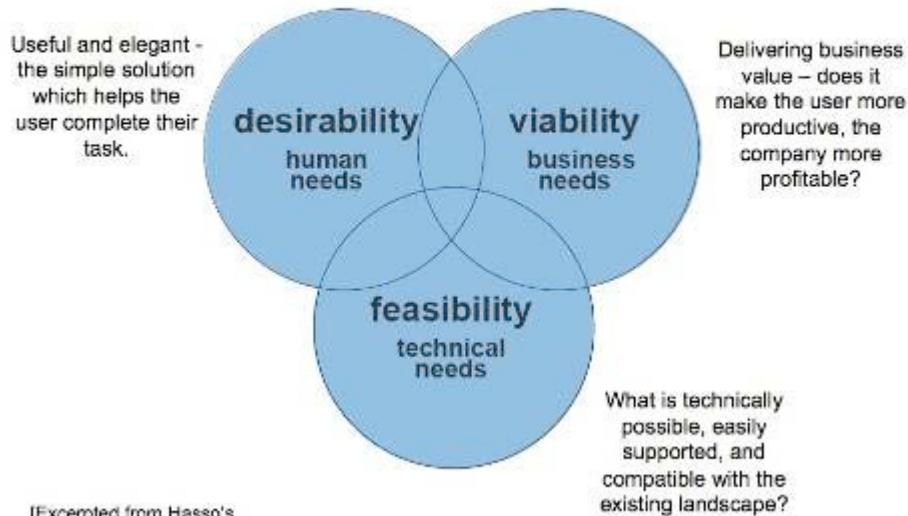
In parallel to other duties at SAP, Natalie conducted research that focused on changes in high-tech industry following Y2K, the dot-com crash, and 9/11. A central goal of that work was to understand how a growing focus on the market and on customers manifested in changes internal to the corporation and the management of employees. Consistent with that industry trend, in recent years SAP has made a conscious shift from being a technology-driven company, to one that is much more attuned to the market and its customers. This shift has resulted in an internal discourse and set of practices targeted at raising employee awareness of and responsiveness to the market and customers. (Hanson 2004) This interest in consumer behavior (end-users in the software industry) had resulted in a resurgence of interest in ethnographic methods in business, and there were a growing number of articles appearing in the U.S. media about anthropologists and ethnographic methods. While not the subject of this paper, that discourse served as a backdrop for the positioning of user research through ethnographic methods as an operational practice inside of SAP.

Lucy Suchman (2000) argues that "the interest in corporate anthropology involves the anthropologist herself in an identity marked as exotic Other within the context of familiar commercial and technological worlds". It is true that at the outset, an anthropologist within an organization like ours was a source of curiosity more than anything else. Co-workers

---

[1] While SAP does run its operations on SAP software, that is not the focus of this paper. In that regard, we believe that SAP represents a typical global organization, in which information technology and business strategy intertwine both as a service provided to potential clients and as an internal operational practice.

described themselves affectionately as Natalie's "specimens", without really understanding why an anthropologist would be interested in the corporate context. Using her colleagues' curiosity as a launching point, Natalie began to talk with her colleagues more and more about her research, and the growing use of ethnographic methods in business. Natalie used familiar consulting tools like the Venn diagram to build the bridge between the consulting approaches familiar to SAP, the 'exotic' new perspectives that anthropology could bring.

The Venn diagram above was used by SAP founder Hasso Plattner at SAP's annual conference, Sapphire. Natalie and her team added some additional descriptive text, and we continue to use it today to raise awareness about the user perspective in consulting engagements in cases where technology and business requirements are known, but user requirements are not well understood. This visualization also enables the team to explain the importance of user-centered design, user experience, and social science methods to stakeholders inside of SAP.

Although far from a comprehensive description of our work context and experiences, the previous paragraphs have outlined some of the factors that shape our organizational practice today, The remaining sections illustrate the perils and opportunities derived from

our sustained participation in organizational context, specifically as they related to how we manage the visibility of ourselves and our research, as well as the meaning of our practices..

Vignette I. Make the Unseen Visible, but Losing it from Sight: The Woeful Pie Chart

After having expressed the wish to bring her anthropological training to bear on her work at SAP, Natalie was given the opportunity to conduct research study as a 'proof-of-concept' for what might be possible. That study has come to mark the beginning of the User Experience function in SAP's Business Operations group. At the time, the operations function in the U.S. was focused almost exclusively on the sales line of business. The team's charter was to increase the productivity of sales people, as measured by (among other things) license sales revenue per sales representative. It is therefore not surprising that this first research project involved shadowing revenue-generating employees. The research was justified to an executive team on the basis of the opportunities it brought to understanding sales activities, specifically looking for opportunities to increase their productivity.

At that moment, Natalie was the sole researcher who handled almost every aspect of the study– recruiting, scheduling, capturing field notes, data analysis, and the reporting of results. The final deliverables included a presentation that was given to the Senior Vice President (SVP) of Business Operations (the project sponsor) with a list of possible action items, including business scenarios illustrated with quotes from study participants, and a series of recommendations.   This type of work is perhaps the standard of ethnographic practice at the service of business strategy in which the "unseen" of work practices is reconstructed and made accessible to decision makers who might be unaware or distant from it. Messaging such findings involves the creation of reports, diagrams and other artifacts that attempt to serve as boundary objects (Star & Griesemer, 1989) between recipients and researchers.

In this case, the presentation materials produced included a slide that attempted to visualize the frequency with which certain key activities occurred. It was a pie chart based on the coded data, intended to provide visual impact and designed as an anchor point for discussion with executives who might not tolerate the narrative detail in the findings. When the study results were presented to the Senior Vice President of Business Operations, this pie chart was used in addition to informal, verbal findings; the complete presentation materials were delivered later to an entire management team.

At the time, this pie chart in particular appeared to be extremely effective in stimulating dialog with the sponsor and others about the complex stories and data behind it. In fact, it effectively enabled messaging of complex findings all the way to the executive level, a success rarely experienced for this kind of work. Without it, the research and its outcomes may have not had the same lasting success. At this point, it appears to be the only artifact from the research that is still circulating. To the best of our knowledge, none of the detailed business scenarios (or even the sales people screen shots) have been distributed further, despite those being, from our point of view, the most interesting and valuable aspects of that research. We have come to call it the "woeful" pie chart, the one which has been used and

re-used the most, and in many cases, unfortunately, misused and surely misinterpreted. This might be an inescapable fact of ethnographic practice. Or perhaps the artifact itself, with its simplified and attractive appearance, affords the twisting and positioning to suit the needs of the speaker.

As professional practitioners and as members of our particular organization, we are still learning and re-learning that it is the contextual interpretation and ongoing analysis that makes field data useful—the nuances are not made visible except in situated conversations. Partly in response to this, we have made some changes in how we handle our reports today. For example, we insist on providing readouts before we distribute the soft copy of a report, and we provide private readouts to help interpret or expand on key topics. We hope that this approach will help our audience understand the richness and complexity of the findings, so that they will come back to us again and again, rather than assuming all the data they need is in the final deliverables. What we have come to learn from this experience illustrates the subtle ways in which we adapt our professional practices to suit the contexts in which we operate.

There had been a few other studies conducted during a similar time frame, carried out mostly by outside vendors. The first had yielded very general findings, and had not provided any significant new insights that could be used to drive productivity improvements. The second study had been conducted by a usability testing firm, and its results had limited value to the operations management team because the outcomes were narrowly focused largely on ways to improve the intranet. At the time, the research Natalie conducted had succeeded in looking for 'white space' (opportunities to improve productivity that might not have been uncovered otherwise) and that the research approach and final deliverables permitted the management team to more deeply perceive the problem areas, the frequency with which they were occurring, and to begin to understand the real impact from a salesperson's point of view. The research also made visible problem areas that were known but were previously not well understood. The detailed findings and recommendations permitted a level of visibility on a core process that had previously not existed, and specifically showed the impact of those process breakdowns on sales productivity.

Overall, this initial work was perceived as innovative and adding value, and it contributed to the increased understanding of the management team of how anthropology and ethnographic practices could be blended with work in business operations. This initial success began to make ethnographic research methods visible within the organization, and opened the door for future engagements. However, as a junior member of the operations team, Natalie had very little opportunity to drive uptake of the findings, and almost no visibility into what was done to address the issues uncovered. Lack of direct access to members of the executive team, lack of influence in general, and lack of resources severely limited what could be done to extend and act on the findings. At least in part, some of these challenges related from "losing sight" of research findings are derived from the position that ethnographers might occupy in the organizational landscape, and the visibility and access that such position might afford them. At the time of our study, we didn't have enough

visibility and access to the corporate strategy and direction, which in turn made it challenging for us to message the findings in ways that would be compelling to senior management. Several more years and projects had to pass before a team dedicated to similar work was constituted and our work better positioned in a way that provided us visibility and the means to manage uptake.

In addition to these challenges, we also face the problem of being disconnected from the results of our work. We know that our findings have been used to build a number of business cases, but for the most part we have learned about them after the fact. Not too long ago, we learned that the COO was speaking with enthusiasm about a pie chart that showed where sales representatives were spending their time. A member of the leadership had to explain to the COO that the person who had done that research worked in their group. On one hand, it is fantastic to see that the research has had such lasting value; because so little has changed since for the salespeople, so most of the findings remain quite valid. One of the interesting things here is that the company has changed, sponsors and stakeholders have changed, but much of the day to day work that was originally the subject of study has not changed all that much in the intervening years. What is bothersome is that the team is not being recognized or acknowledged. As individual practitioners gain recognition and teams dedicated to similar practices emerge, it is common that resources need to be justified on a regular basis; having our work mis-interpreted (or not getting recognized for our work) can present a significant long-term risk for resource justification. Therefore, in such situations one has to be even more careful to ensure that proper work recognition is assured.

However, at that time, the entire concept of User Experience was still being proven. As such, the team's primary charter was in technical realms, for example bridging between the business and IT or standard development. These factors influenced the way we thought of the solution space and its presentation – i.e. many of the recommendations were of technical nature and presented in that way. Some of the findings were in fact used to design and implement a small internal software application to support important but previously unidentified concerns of sales personnel. However, without significant resources at our disposal, it was extremely challenging to demonstrate the ways in which technical recommendations could have larger business impact. Perhaps most importantly, having a sole researcher on the project made it extremely difficult to manage the presentation of outcomes in ways that would be simple and compelling enough to engage an executive audience and sustain the visibility of the work. In hindsight, it is fortunate that our work was able to have any impact at all, even if in some cases such impact was not completely aligned with our intentions as researchers.

Vignette II. Projecting retrospective inquiry as relevant to the present and to a set of envisioned futures

Despite the troubled visibility of some of the artifacts produced from the initial study, it cannot be denied that eventually that research and other changes played a significant role in making our expertise visible and opening opportunities for further ethnographic work. A

few years later, the regional Chief Information Officer came to us to find out what further research, if any, had been done on sales personnel. His interest was around the ways that the existing Customer Relationship Management (CRM) software was used by sales personnel to keep track of activities with their customers and prospects, communicate projected revenue by quarter, etc. Although we had conducted numerous user research studies within the sales and marketing organization (a few of them using ethnographic methods) none of them directly answered his questions. However, exploring the relevance of prior insights in new situations has become a way of opening up new opportunities for organizational contributions and, naturally, we were not going to miss an opportunity to present our work to the CIO! As a result, research findings from multiple prior studies were used to prepare a summary of what had been learned about the CRM implementation. In a personal meeting with the CIO, a general overview presentation of all the research projects was provided and then, through the course of the discussions, specific topic areas and supporting materials were reviewed based on what appeared most relevant for the questions at hand. While the overview presentation provided the framework for discussion, however, the majority of the data and the rich stories were exchanged during that meeting were anecdotal, drawn from memory and reconstructed based on the questions the executive was asking.

As a result of this "retrospective" presentation and the dialog that ensued, we had a chance to learn about a new program intended to bring improvements to the internal implementation of CRM. As it turns out, many of the areas that had been identified in the original ethnographic research on salespeople continued to be a challenge several years later. Most importantly, through our retrospective review, we had succeeded in making the sales point-of-view visible for the CIO and his project team. Inclusion of the users' perspective at the outset of the project would be critical to ensure uptake on the improvements that were planned for the system. Some of our prior research, for instance, had shown that the sales people actually spent very little time online in front of a computer; they were hyper-connected, but it was largely via a Blackberry or mobile phone, and not using a computer browser. Even when sitting at their desks (which were equipped with land lines), they more often than not opted to use their cell phones. Of the time they spent in front of their computer, most of it was spent looking at market news and trends through a personalized service like Yahoo! Finance, and only a very short amount of time each week was spent in the CRM application itself. One insight we were able to bring to the conversation at the time was that the sales representative perceived the tool as a vehicle for management reporting, and therefore only maintained the fields that they knew would end up on an executive report, or that impacted how and how much they were being paid for the software licenses they sold.

Using historical information, we were able to present the system user's point of view in a way that was unique inside SAP. Prospectively, we were able to position not only our expertise but the ethnographic approach as strategic and useful. After years of practice talking about the findings, we were finally confident that we were both sought for and able to speak to that point of view in a way that was compelling at the executive level. It was more than two years after that initial study, but it was the first time that we had been

approached by a member of the executive team to provide insights on users at the outset of the project. Even more importantly, the research was now being used to enable strategy, prioritization, and funding decisions, and not simply system usability.

Vignette III. About Design: Prospective but Partially Blinded

A recent team engagement represents a clear example of how our trajectory of work has opened up significant avenues for key contributions of our ethnographic work as well as positioned us closer to the challenging area of organizational design. Motivated by cross-company tensions about the value being derived from a particular operations service offering and rather than continuing to point fingers, two former project sponsors recommended our services to another executive. We were asked to explore and analyze the field's point of view on the service in question through a series of in-depth interviews.

As we were working on the interview protocol, we gained familiarity with the various parties involved. Recognizing the seniority of the individuals involved (and the tensions), the involvement of senior members of our team became essential. Through interactions with the various stakeholders, we learned that there were at least three distinct research agendas or objectives at play, and that – in order to ensure maximum uptake of our findings – we should do our best to accommodate all of them in the methods, the protocol, the findings report, and in the verbal delivery of findings. This is not an uncommon situation in which organizational ethnographers find themselves but little in our collective knowledge seems to speak to ways of managing such a challenge.

The main project sponsor appeared strongly committed to the ethnographic approach, very interested in hearing the field's point of view. He enlisted our support to understand the issues, and identify areas where his global organization needed to change. The secondary sponsor was a regional executive who was interested in the same issues, but who also explicitly stated his interest in proposing a new regional organizational model based, perhaps, on his expectations of the findings. Finally, a third sponsor (to whom the first directly reported), was interested in ensuring that his organization remained aligned to the field's priorities, thereby ensuring it's ongoing relevance to the corporation. Identifying such diverse perspectives in the course of research planning helped in selecting the right approach to the design of the interviews but, naturally, some compromises were necessary. Thanks to prior research efforts and personal work of some team members as part of a regional sales operations group, we already had a fair amount of visibility into the challenges existing with the service in question. Specifically, it was clear that most of the formal processes were not well perceived in the field because they were slow and ineffective, and that as a result, personal networks and informal processes prevailed as a way to get the tasks completed. Considering all of this, we were able to formulate a protocol that pursued organizational issues directly. Rather than asking 'how are these [formal] processes working for you?', we asked more open-ended questions such as 'how are you getting this task done?' The process of defining the protocol itself involved extensive collaboration with some of the sponsors to validate and explain our approach.

The findings were not completely surprising and they did identify numerous areas of improvement. As a neutral third party were able to provide feedback to the stakeholders involved, well-grounded in data from their internal customers. In our professional commitment to make the context of our studies as visible and accessible to our sponsors as possible, we transcribe and code all of our interviews and create reports that are heavily enriched with direct quotes, making it quite explicit that we are presenting on behalf of the end-users. We take special precautions to make sure that the identity of our research participants does not get compromised in order to comply both to our ethical commitments as well as with the labor laws of the countries and regions in which we operate. As with our prior experiences, instead of disseminating reports indiscriminately we were especially careful to manage the issues uncovered as a dialog with all of the direct and indirect sponsors. This helps us to ensure that the data is made visible only to those that have requested the research. Not only does this practice ameliorate the possibility of misuse or misinterpretation of our findings but it establishes a strong partnership of collaboration with our sponsors where the interpretive sense-making is perceived as a shared responsibility. When we are successful in collaborating in this way, it helps to ensure that we remain engaged as experts on the data and its interpretation. In that way, we can help guide the development of an actionable plan that truly reflects the findings.

This type of relationship is especially key when we leave the problem space and attempt to reason through a possible set of solutions.

In this particular case, we were especially cautious about making explicit recommendations in the research report as we typically do for research on, for instance, information system design and user interfaces. When research is done in the service of organizational design, we have found that we can never put enough information into a written report. Even with a rigorous discovery process, the political landscape or objectives shift in the course of the research. As a result, we are always somewhat blind to how the research may be used, and whom it will impact. In other words, we have learned that trying to manage the future meaning of our work represents a significant challenge that often results in unintended and unplanned uses for the artifacts we produce. We try to keep our written reports tightly focused on the data. As much as possible, we then ask for a seat at the table to help with the interpretation of findings, and how they can be applied to solve the business challenges at hand. This type of conversation allows us not only to manage the way our inquiry serves the organizational needs at hand but also increases the visibility of our approach and the overall understanding of our potential roles in the future.

CONCLUSION

So after the first study was concluded, Natalie was invited to move into a growing, global team, and to build her own team from scratch. While her ability to manage technology and technical staff remained at the core of her value proposition to the company, she decided to use some of the now precious resources given to prove out what more could be done with something she had decided to name 'User Experience'. An information designer was hired as the first team member who complemented the research activities being conducted. The rational for this move came from the belief that individuals trained in information architecture and design brought big picture thinking skills and experience interpreting business requirements that would be an asset to the development of the team. As illustrated in some of the vignettes presented earlier, we had seen significant rewards and challenges from being able to visualize findings and recommendations to stakeholders. So one of the biggest benefits predicted for working with a designer was that that person could help visualize research and recommendations in ways that would further accelerate understanding and appreciation of the role and relevance of User Experience.

In response to the growing focus on operational efficiency, the User Experience team has further formalizing how we work. We now function as a small consultancy; our services are managed and 'sold' internally as part of a broader services portfolio. That portfolio is managed and measured, which means that services have to demonstrate measurable impact in order to ensure budget and resource allocation in the annual planning cycle. All services have KPI reporting that is delivered up to our senior management. To support the positioning of our services, we have a service catalog in which our services and their value proposition and reference customers are presented. Each service offering has a standard deliverable(s), which is consistently branded. As mentioned earlier, we have a handful of sponsors who know us and our work very well. These executives serve as reference customers for us, and they also refer their peers to our organization. However, we continue to gain visibility and recognition for our work, we find that our 'thump book', a slide presentation of reference stories, combined with our growing reputation results in an appreciation of our capabilities and expertise without the need for a verbal reference. At this point, our main competition is outside consultancies, because they don't require executive prioritization and support, and are sometimes able to respond more quickly. However, as the years progress, we are finding that our deep knowledge of the company and how it works (the institutional history, in some cases) is a competitive differentiator in getting us engaged in wide range of strategic projects.

Two years later, the User Experience team itself is larger than the entire original global support team created at the outset. Despite the personal or collective preference that we may have for the use of ethnographic methods, currently we employ them very selectively because this type of research is expensive and time consuming to execute. Unless ethnographic methods are formally requested, we typically find that in today's economic conditions the organization has little tolerance for the time it takes to conduct the research,

perform the analysis and prepare the final deliverables. Over time, we have learned that ethnographic methods are best deployed into 'white space' - or a broad area where there is an indication that problems exist but where the complexity of the situation is not fully understood. However, based on what we now know about the company's direction, executive priorities, and so on, occasionally we take a calculated risk and deploy resources to conduct research before we're asked, before a sponsor is named, or even before a project is formalized. That provides us with the lead time we need to get to know the situation, conduct some research, and be prepared for a formal consulting engagement. This can only be achieved in a context where longstanding relationships and trust have been established, sometimes even based on other types of work and skills that are brought to the table by recognizable individuals with a track record of organizational achievements.

As we continue to evolve as a team, we can say with confidence that our work in User Experience continues to exceed original expectations. We now have relationships with half a dozen executives who understand the organizational relevance of our work and the value it brings. Some of those executives have been customers more than once, and they tell other executives about the value they have derived from our services. There is, naturally, a great deal of personal rapport driving such relationships as some of those executives have both supported and witnessed individuals in the team evolve and grow along the years. In a corporate climate where organizational change and is the norm, these relationships are the mainstay of long-term success. We still support the organization's internal systems, and that work ensures that we can continue to justify the company's investment in User Experience employees and the corresponding budget necessary to operate the team. However, as the team evolves in its knowledge about the organization, its needs and goals, we are able to do the same work more efficiently; which in turn both frees us up for new work, and enables us to take on more complex projects.

Currently, our budget also enables us to work with vendors on larger projects, but in those cases our team members are tightly integrated – co-conducting the research and analysis, and in some cases also co-developing the final deliverables. We do this to ensure that we retain a deep understanding of the data that is so central to our team's value. In cases where it is difficult or impossible for the team lead to actively participate in the research, special strategies are devised, as we have reflected through the previous sections, for the kinds of activities that allow us to manage the messaging of result, the reuse of accumulated knowledge, and the opening of new opportunities for our work to be relevant and of use. This involves very active and sometimes contentious participation in the construction of all final deliverables. Although the role of the team lead is most often to help the team better understand what is happening in the business (the most serious gap that faced the first author at the beginning of its professional trajectory in the organization) an active involvement in the construction of deliverables and other reporting activities ensures that the final report and readout is compelling to our sponsors and stakeholders.

In concluding, we have illustrated here some of the challenges that in-house ethnographers face when participating in long-term engagements in organizational life. In

particular, we have reflected on some of the challenges and opportunities we have faced in evolving and sustaining our particular ethnographic practices. In the three vignettes presented practitioners in similar contexts might recognize some of their own challenges when faced with the ways that their own practices are received, used, and re-used over time. As a field, perhaps we need to engage in a collective conversation about these challenges and the practices that would allow us to overcome them.

ACKNOWLEDGMENTS

REFERENCES

Button, Graham. Editor
1993   *Technology in Working Order: Studies of Work, Interaction, and Technology.* London &
            New York: Routledge.

Hanson, Natalie.
2004   *Consuming Work, Producing Self: Market Discourse in Dispersed Knowledge Work.*
            Unpublished doctoral dissertation, Temple University, Philadelphia.

Heath, Christian; Luff, Paul.
2000   *Technology in Action.* Cambridge. Cambridge University Press

Fetterman, David
1998   Ethnography. Thousand Oaks. Sage Publications

Forsythe, Diana E.
1999   *"It's Just a Matter of Common Sense: Ethnogrphay as Invisible Work"*, Computer
            Supported Cooperative Work, Vol. 8, No. 1-2. pp. 127-145

Orbuch, T.
1997   *"People's accounts count: The sociology of accounts.*" In J. Hagan and K. S. Cook (Eds.),
            Annual Review of Sociology, 24: 455-478. Pale Alto, CA: Annual Reviews.
Orr, J.
1996   *Talking About Machines: An Ethnography of a Modern Job.* Ithaca, NY: Cornell
            University Press.

Rabinow, P.

1977   *Reflections on Fieldwork in Morocco.* Berkeley, CA. University of California Press

Star, Susan., James. Griesmer.
1989   *"Institutional ecology, 'translations' and boundary objects: amateurs and professionals in Berkeley's Museum of Vertebrate Zoology."* Social Studies of Science 19(3) 387-420.

Suchman, L.
1987   *Plans and Situated Actions: The problem of human-machine communication.* New York: Cambridge University Press.

2000   *Anthropology as "Brand": Reflections on corporate anthropology*, published by the Department of Sociology, Lancaster University. Retrieved from: http://www.comp.lancaster.ac.uk/sociology/soc058ls.html

Design Anthropologists' Role in SMEs: Unveiling Aptitude and Attitude

MARK ASBOE
SPIRE – University of Southern Denmark

Research collaboration and methods development within user-centered design and the emerging discipline of user-driven innovation have traditionally taken place in research institutions and large forward-looking enterprises. Due to this fact, concepts, methodologies, approaches have primarily gained foothold in companies with resources, competencies and organizational support to make sense of this seemingly fruitful but somehow elitist approach. The roles that the design anthropologist plays in user-driven innovation will depend on size and competencies of the specific organization. The economic realities of small-to-medium sized companies (SMEs) suggest a more holistic research perspective from the single design anthropologist that potentially constitutes the entire (and affordable) user experience department of the SME. This paper suggests a plausible approach for utilizing the skills of a design anthropologist in a small manufacturing company based on experience from two collaborative projects. Rather than informing about 'how we look at users' the design anthropologist may inform and reframe the company's potential for innovation.

INTRODUCTION

In a European context small-to-medium sized companies[1] play an important role to the national economies. Understanding how design anthropologists may fit into a small manufacturing company is important for the promotion of ethnographic praxis in other settings than large multinational or consultancy companies.

> Micro, small and medium-sized enterprises (SMEs) play a central role in the European economy. They are a major source of entrepreneurial skills, innovation and employment. In the enlarged European Union of 25 countries, some 23 million SMEs provide around 75 million jobs and represent 99% of all enterprises. (European Commission 2005)

In a Danish context the theme of User-driven innovation has over the last three years gained much attention by policy makers and companies. The Ministry for Economic and Business Affairs is currently sponsoring projects to ensure a national competitive advantage within the field of user-driven innovation[2]. Anthropology is promoted in government reports as a key discipline in pursuing this strategy and in particular in understanding users' latent needs. (Rosted 2005: 36-37) (Danish Agency for Science, Technology and Innovation 2006: 16) However, as the Danish company landscape consists of a high number of SMEs

---

[1] See http://ec.europa.eu/enterprise/enterprise_policy/sme_definition/sme_user_guide.pdf

See http://www.ebst.dk/brugerdreveninnovation.dk/about for information about the programme.

there is potential room for finding ways of utilizing the skills of the anthropologist in ways that goes beyond employment in large companies or short-term consultancy offered user studies. A full-time employed design anthropologist in an SME is implicitly conceived of as unrealistic as his or her task doing user studies has a certain duration and momentum within the innovation process. I believe that this rather limited perspective of the anthropologist's potential role is due to the fact that anthropologists both have been given and partly accepted a role within the field of user-driven innovation by the co-inventors of the field such as FORA (The Danish Enterprise and Construction Authority's Division for Research and Analysis). Anthropologists are slowly but critically embracing this invitation, but the challenge is now to develop our own role in this game. Do we want to take the expected role as the user experience advocates inspired by large U.S. companies such as Intel, Pitney Bowes and IBM and is this in a SME context even a plausible approach? Or do we need to challenge our own and others' expectations of what design anthropologists can and should contribute with in small-to-medium sized enterprises?

This paper points out some of the implications for design anthropologists working in SMEs based on experience from a single manufacturing company between 2006-2008. I suggest that working in a small or medium-sized manufacturing company can redefine the role of the design anthropologist in several ways but this requires; the design anthropologist to necessarily understand the broader context of the company – the value network (Christensen 1997), as SMEs often are sub-suppliers and thus dependant on larger companies. Moreover the design anthropologist needs a basic understanding of business to be able to argue findings in a relevant terminology. The design anthropologist must pragmatically be able to balance looking into the company and studying end-users (Heiskanen & Repo 2007). This apparently obvious premise might not be that obvious after all as observed by Janice Anne Rohn (2007:25).

> An irony of UX professionals is that they are often so focused on understanding their external customers, they do not spend the time necessary to focus on the internal customers: the stakeholders within the company. However, without buy-in and support from internal customers, the products and services will never reach external customers.

The proposed all-rounder role of the design anthropologist will of course have an effect on how deeply she or he can go into the various fields and thus potentially dilute the quality of the work. These trade-offs might not fit the attitude of the skilled design anthropologist who will have to redefine and expand his or her area of competence and interests by also critically examining the internal organizational and managerial foundations for supporting this approach to innovation. This means challenging procedures, traditions and taken-for-granted ways of doing within the organization and thus challenging the managers who maintain such structures. The attitude and willingness of the anthropologist to leave the comfort zone is crucial (Baba 2006: 35-36). Concurrently the small organization can potentially support the design anthropologists' holistic approach in understanding the business context as well as support quick decision-making in an un-bureaucratic

environment. This I refer to as the company's *aptitude.* Design anthropologists in SMEs face a number of challenges that can either support or hamper their efforts. How the design anthropologist responds to these challenges is of course individual, but will be important to understand and accommodate in formal anthropology education as more and more design anthropologists move into industry. The smaller SME organization potentially will have a more receptive audience that can support the design anthropologist's attempts through ethnographies and anthropological perspectives to influence strategic design decisions (Dourish 2006) and business development.

Case study

I will briefly describe the context and some findings from my research. The SME categorization is probably not interesting in itself – what is though, is the specific company behind this broad category. Dizplay A/S[3] is a relatively small sub-supplier and from a value system perspective, rather distant from the end-users. Dizplay is a leading manufacturer & integrator of Information and Passenger systems for the train industry and the primary customers are train builders and train operators. Products include seat reservations displays, system controllers, emergency speech units and infotainment systems. The company employs app. one hundred people with highly specialized engineering and project management competencies – ranging from software, hardware to mechatronics. It has limited experience with user-centered design methods. Human resources are scarce when it comes to explorative activities that distract employees' attention and time from the core business of running projects. This issue will of course appear in large companies as well. The company develops systems based on (and limited to) their customers' (train builders) expectations and thus has a rather reactive approach to product development. In this example it seems that a conservative market makes a conservative sub-supplier – and if one adds the very strict standardization, quality and safety regulations in the train industry the willingness to take risks becomes even smaller.

This incremental and technology centered approach to product development makes sense to train builders and has given Dizplay a competitive advantage, but hardly nurtures innovating products and services directly aimed at enhancing the passenger experience of traveling by train. The strong affiliation and market focus between Dizplay and key customers has had the effect that the company historically has had limited attention to new (to-the-company & to-the-world) product development and innovation in a broader sense (Schumpeter, 1934). Product innovation within the company can be described as incremental, sporadic and technology driven – a general tendency among Danish SMEs (Rambøll 2005: 8). Innovation based on end-user needs (whether articulated or non-articulated) is practically non-existing and if so, the needs are heavily filtered and formulated by the customers. Operating within this fixed value system is what has made Dizplay a successful and well-established company despite fierce competition. The same value system

---

[3] The name of the company has been changed for the EPIC 2008 proceedings. The company is referred to as Dizplay A/S. Names of people and places have not been changed.

is what limits Dizplay in exploring passengers' needs and thus hampers a proactive approach to new product development that goes beyond the existing systems and value system (Dizplay - Train builder – Train operator – End-user/passenger). Or maybe it is the managers and employees who are more likely the main reason why the company has been successful. Perhaps it is not even the value system that limits anything – but rather our (the Dizplay employees') imaginations of what is possible. Broadening the boundaries of what is possible and provoking existing assumptions on value systems and business models is in my opinion what is at stake here. Whether the small sub-supplier should be limited by traditions and value systems is a negotiation that takes place between people and of course in the context of the market. One example of Dizplay's focus on optimizing activities within the existing value system was in 2006 when the company received the IRIS certification, which is an industry specific quality standard measurement certificate. At that occasion Senior Manager of Sales & Marketing, Jens Møldrup, commented in a press release: 'We are now even more prepared for conducting the development within passenger information in the next many years. And our customers need no longer audit Dizplay to approve us as supplier', thus implying an alignment of Dizplay's value chain activities with the customers' value chain activities. The IRIS certificate reflects the company's ability to structure complex project management with a focus on quality and standardization. The conditions for dealing with the complexity of innovation activities are present, however optimization is not innovation and does not lead to new products. The point I wish to make is that the design anthropologist is equipped to facilitate this kind of knowledge creation of the relation between the *habitus* (Bourdieu 2006) of the organization and the untapped potential in both product and business development that arises in the wake of bringing in end-user perspectives to a company with non or little experience with this approach. In sessions of making sense of user studies it therefore becomes essential that the design anthropologist can couple the analytic and constructive approach to new product and service development with a more reflective approach. By facilitating and investigating how the same user studies potentially can inform and provoke assumptions of a company's product development approach, how value networks are conceived of and their strengths and weaknesses, the design anthropologist can assist employees and managers in articulating strategic implications. The anchoring and positioning of the design anthropologist within the organization would preferably be between and within conceptualizing product/service ideas and business opportunities typically in R&D and Management. I suggest that the design anthropologist should engage not purely in user studies and the translation into concepts, but to also help link organizational learning with product & business development.

Three collaborative projects

In the following I will describe two projects in collaboration with Dizplay during my M.Sc. IT Product Design studies at the University of Southern Denmark. The third project is a part of my doctoral research and is ongoing. What I wish to illustrate is my attempt to make not just user studies, but also design anthropological perspectives on the organization resonate within the company. The first project was a user-centered design approach including user studies, co-ideation and concept development. Nevertheless the activities and

especially a co-ideation workshop opened up to some very interesting questions and perspectives that led me to dig deeper into the organizational conditions for the innovation approach I want to introduce to the company and its value network.

Studying end-users

Project one was a three months full-time user-centered design internship that took place in 2006. The R&D manager in Dizplay was interested in getting new perspectives on the potential of in-train infotainment e.g. LCD screens that can display content such as news, passenger information and advertisement. My approach to this challenge was desk research and a competitor study to map what was in market, and field studies in European trains for a period of three weeks. I held a pre-ideation workshop and invited ten participants from various Dizplay departments to help make sense of the material. From this I prepared a project report with a number of suggestions for further action. Moreover I made a simple prototype that illustrated one of the main points that the workshop participants derived from the user studies; that passengers want relevant passenger information and not advertisement mixed with news. This will probably not come as any surprise to anyone who has actually been traveling on a train, however this understanding stood in striking contrast to the typical expectations from customers, the train builders. The concept spurred some interest but was left on the shelf. What I as a design anthropologist was puzzled by was the fact that the participants were very sensitive to the data and had an ability to both articulate concept ideas and strategic implications, however neither the responsible managers nor the organization did support taking such knowledge further. From a professional viewpoint the dilemma between this lack of will, skill or motivation combined and the employees' ability to easily come up with concepts and turn them into functional prototypes was a surprise to me that needed further investigation. From this short project it became clear that user studies do not necessarily trigger innovation.

Engaging the organization

The second project which ran over a period of five months, focused on Dizplay's value chain activities (internal organization) in relation to Dizplay's value system (Dizplay – Train builder – Train operator – End-user/passenger) (Porter 1990: 41-43) and especially how and why this structure had been built up and maintained over the company's twenty years of history. I coupled this analysis with insights from interviews and participant observation of the daily life within Dizplay. I would sit among the engineers and read and write at my own table, have informal chats with them during lunch, participate in meetings and have more formal interview rounds. I was in the company almost each day for a three months period and established close relationships with several employees. Through Pierre Bourdieu's (2006) analytical framework I sought to argue how one may talk of a sort of Dizplay *habitus* as a function of the company's history of being a sub-supplier in the previous mentioned, fixed value system. I argued that the workshop represented a heterodoxic situation in the sense that the missing actions taken from the created knowledge showed how structures are

maintained, but also how individuals or agents can question the existing situation and in this case through end-user input. From the descriptive and analytical level I suggested an organizational structure for how to implement user-driven innovation in Dizplay. By this I want to emphasize the opportunity for the responsible design anthropologist to utilize his or her analytical skills on the organization and turn it into prescriptive and concrete recommendations. By linking the past, the present and the future potential situation of the company in close relation to a focus on new products and services I believe the design anthropologist takes full advantage of his or her disciplinary skills. From my experience this knowledge enabled Dizplay managers to get a helicopter view of their praxis and a clear vision of how Dizplay could benefit from user-driven innovation through changes in activities and the business model. In this concrete situation it moreover led to co-funding my doctoral research in user-driven innovation in SMEs. This project revealed that the SME alone may not be in control of innovation.

Engaging the value network

My ongoing research deals with opening up new windows of opportunity between current and potential value networks – new constellations of companies that will add value to each other's activities, products and services. The analysis in the previous project clearly showed Dizplay's interdependency to other companies. By constructively utilizing such relations between people and organizations the project aims at establishing a forum and concrete partnerships to develop innovative products, services and systems across companies. The project is named Trackers and takes place in collaboration with researchers from the Sønderborg Participatory Innovation REsearch centre[4] (SPIRE), which is a part of the University of Southern Denmark. Our assumption is that Dizplay as a sub-supplier necessarily must strategically and practically embrace the user-driven approach in consortium with partners in its value network to share the vision of system innovation. Innovation in this field necessitates collaboration among a number of players as each of the companies has a limited field of expertise. Understanding the potential synergies between the companies and how to practically utilize them to serve end-user needs is one of the challenges. One of the outcomes of the research was a Value Network Vision Seminar co-hosted by the SPIRE centre and Dizplay. The intention was to kick off internal Dizplay activities and send a strong signal to the value network partners that Dizplay has a pro-active approach to innovation and create an event that directly inspires and challenges traditions and ways-of-doing. The reasoning behind this is very similar to Rohn's (2006) observation. Dizplay must involve and understand the central stakeholders to achieve results. In this case the central stakeholders are found not only in the internal organization but include external partners and potential customers as they have the same importance in bringing novel products to market for a small sub-supplier. The purpose of the Vision seminar was first of all to facilitate the vision of user-driven innovation and make it resonate within the value network. By bringing various perspectives into the seminar we spurred some interest and willingness to embrace this approach. We invited speakers from Denmark's largest train operator to frame the

---

[4] www.sdu.dk/SPIRE

seminar activities in a business perspective as well as an experienced design anthropologist to share her experience.

Less orthodox was our approach to invite participants to make sense of our user studies of train conductors and train passengers and (hopefully) see the potential in involving end-users in the innovation process. One of the partners in the SPIRE centre is the Dacapo theatre[5] that for a number of years has worked with change management in organizations through interactive theatre. By collaborating with the theatre in the planning of and the facilitation of the seminar our intention was to utilize their skills in opening up for fruitful and eye-opening discussions. Throughout the vision seminar the participants were engaged with small plays performed by three actors. The discussions would allow the participants to discover new ideas for products, systems and types of collaboration. We invited the train conductors who have participated in our studies as a source of information and as participants in the innovation process. This process allowed for sharing several perspectives on the same situation seen from the perspective of the train operator, the train builder, the supplier of passenger information, the train conductor, researchers and open a discussion about how to change this situation into a preferred one e.g. through new products or services. The themes that we have extracted from the user studies are;

Crosschecking - passengers tend to crosscheck with several train conductors to be sure that they are in the right train. Our assumption is that people do not always need more information. Rather they need to know that the information they have is consistent. This opens up to questions such as: How can we help people to make meaningful links between disparate information sources?

Trust and local knowledge - there is a tendency among certain passengers to trust printed journey plans more than the train conductor, who can have up to 40 years of experience. But train conductors often have the most locally relevant and recently updated knowledge. From this we ask questions such as: How can we ensure that passengers benefit from this expertise?

Special needs – some passengers e.g. hearing impaired people can have special needs such as being informed when the train reaches a certain stop. We all have special needs from time to time. How can we support train conductors in recognizing and supporting the various needs of individual travellers?

The reasoning behind choosing the above themes was that they serve three purposes. Firstly they address issues such as providing service either through people or machines or both. Secondly, the challenges that the passengers meet in our examples are typically unresolved and can be addressed by companies individually or in collaboration. Thirdly, they all convey a story about the imperfect system. No matter how well functioning systems are,

---

[5] http://www.dacapoteatret.dk/wm108807

Unveiling attitude and aptitude

there will most likely always be a need for personal service. The question is then how to balance this perspective in the products and services that the seminar participants develop.

Now, two months after the Vision seminar, I have had the opportunity to receive written and oral feedback on the activities primarily from fellow researchers and Dizplay participants. The question is of course – did this seminar fulfill its purpose and how did it make an impact both on the short and on the long run? The latter is of course impossible to give an answer to and I shall focus on the immediate feedback and actions. As stated the purpose was double-sided. To kick-start innovation activities both internally in the company and within the value network. In the following I shall share some insights from the seminar and discuss their implications.

A puzzling value network

The invited key-note speakers included Head of Traffic Information in DSB (Danish State Railways) Tony Bispeskov, Design anthropologist Anna Kirah and Dizplay Senior Manager R&D, Lars Bo Kjøng-Rasmussen. One theme, addressed by all the speakers, was the notion of the experience of the entire journey and that this was a great starting point for innovation. The theme was given different names such as 'the big solution' (Tony Bispeskov), 'the entire process' (Anna Kirah) and 'the whole service' (Lars Bo Kjøng-Rasmussen). All shared the vision of systemic innovation - innovation that is made possible when combining individual companies' technologies, products and services and from this add value to the experience of train travel. This could include ticket purchasing, passenger information, connecting lines such as busses, on-board services, infotainment services etc. Tony Bispeskov from DSB, which is Denmark's largest train operator, challenged the audience that consisted of many sub-suppliers by saying;

> My advice to suppliers; each supplier is actually very good at what they are doing. So if you are making systems for the train let us say it is monitors for the train - within the train or if you are making monitors for the platforms or traffic information systems of some kind – all of our suppliers are very good at what they are doing – exactly what they are doing. What we are looking for is a big solution. A solution that really focuses on all the data we got – how do we relate all those data and how do we distribute those data afterwards to all those different information channels we've got?

This challenge apparently is the Achilles' heel of this particular industry context. Everybody is good at *exactly what they are doing* and the same time everybody is aware of that this is not sufficient when it comes to fulfilling the needs in the market. The big solution and the whole experience that both the train operator and passengers are looking for, depends on the ability for both large and small-to-medium sized companies to strategically and practically share the vision and the risk of participatory and collaborative innovation across companies.

The feedback I have received circles around this dilemma. Apparently there are great collaboration opportunities and a willingness to explore new concepts, but who takes the initiative and what are our organizational foundations when it comes to competencies, resources and time? At the same time there is a concern that the complexity of combing technology forecasting, user needs and collaboration across companies, simply is too risky. These concerns are valid and will of course need to be addressed over the coming months. The immediate actions that we (the R&D senior manager and I) have agreed on taking to inform this process are to run a series of concept development workshops within Dizplay. The reasoning behind this is that we cannot and should not wait for a *big solution* to somehow appear by itself in the shape of a large-scale innovation project across companies. Instead we plan to have three teams of two people focusing on a theme from the user studies. The purpose is to test what results can be achieved within a certain time scale and with fixed resources. The end result will be three prototypes that both addresses user needs from our user studies, that suggests innovative use of current in-house technology and complementary technologies and suggests potential development partners. Our hope is that this project will inform the previous mentioned concerns and help bridge a practical approach with the strategic implications. Moreover the ambition is that the process of making the prototypes will serve as a tangible process tool to free us from the habitual number-focused straitjacket that limits innovation by focusing more on numbers than of purpose and use. Prototypes we believe are a pragmatic and accessible entrepreneurial way of creating interest and commitment with partnering companies and customers. This build-and-show approach to innovation has exceptional aptitudal foundations in this particular company due to the fact that the engineering competencies within the company are both very specialized and diverse. This means that the distance (theoretically) from concept idea to mock-up to prototype is short but so far unutilized. By this approach we believe that we can challenge ourselves e.g. how we perceive innovation – as process, as tangible results and the underlying organizational foundations. With the prototypes we believe we can challenge the value network to commit to collaborating on the development of novel products and services. Before *the big solution* is decided on we need such internal processes in the organizations of the individual sub-suppliers to play together. In this way the challenge is to share visions, but also to take the first steps towards building the first brick of the puzzle and set an example.

These actions of building prototypes based on user insights could and probably should have been taken two years ago during and after my internship. At that stage, however, the strategic implications were not clear, deciding on earmarking of resources was difficult, the awareness within the value network of this approach to innovation was not present and to put it in popular design anthropological terms *the need was still unrecognized by managers within the organization.* All of which are preconditions for such a project to succeed and thereby to be addressed by the design anthropologist.

Broadening the notion of users

I hope to have outlined how a design anthropological analysis can be turned into actionable recommendations, how to both practically and strategically work with concept development and influencing the *habitus* (Bourdieu 2006) and value network traditions through collaborative sense-making of user studies with a broad range of participants in the vision seminar.

Based on the case descriptions and especially the last one which we have just started to understand the outcome of, I want to show how the design anthropologist can serve various purposes in the innovation process of an SME by.

- Facilitating co-ideation sessions based on user insights to help identify strategic implications.

- Creating the argumentation of why the user-driven innovation approach despite its inherent economical, methodological and organizational implications can make sense to a small manufacturing company.

- Broadening managers' boundaries of how product development can happen within a historically fixed value system and critically co-reflect and spar with management on methods, processes and strategies.

- Facilitating the creation of new value network relations based on field studies with the help of a theatre group and bringing this insight across to concept development teams.

- Creating constructive links between the past, present and the future of the organization through anthropological analysis.

- Broadening the notion of users to include clearly stating and showing their relation and contribution as participants in the innovative process.

The *users* we as design anthropologists are studying are not limited to current or potential end-users of products or services. Rather I suggest that we as design anthropologists in an SME context expand our roles and apply our skills to understand, involve and facilitate learning and innovation across all participants within the value network. That means studying our own organization, partner and customer relations as well as those end-user groups that will have day-to-day interactions with our products and systems.

Conclusion

I hope to have shown that design anthropology has a potential in SMEs and not just in multinational corporations. What the potential is will of course differ from company to company. Unveiling this potential is exactly what design anthropology is also about beyond end-user studies. Whether this role in which organizational, business and design anthropological perspectives melt together fits the design anthropologist is a matter of attitude. Based on my experience it is clear that to become an expert in a specific field is very difficult in the SME context. Shifting from empathetically telling stories about train conductors, to arguing how concepts strategically creates a need for a new value network and to critically sparring with managers can both be rewarding and a tough job and especially in small organization with close relations between employees. I hope to have illustrated that Dizplay managers and employees have welcomed this, for them, novel approach to product and business development. Their flexibility and openness represents in itself is innovative and underlines the company's aptitude for user-driven innovation.

I believe my research addresses questions of what design anthropology is and can be. Such implications may be considered in anthropology departments in universities that wish to understand the potential of design anthropology by broadening the notion of users, of unveiling the potential for innovation and in which settings we can apply our analytic skills.

References

Baba, M.
2006   Anthropology and Business. *Encyclopedia of Anthropology*. H. James Birx, Ed. Thousand Oaks, CA: Sage Publications. Pages 83-117.

Bourdieu, P.
2006   *Outline of a Theory of Practice*. Cambridge: Cambridge University.

Christensen, C.M.
1997   *The Innovator's Dilemma: The Revolutionary Book that Will Change the Way You Do Business* (Collins Business Essentials).

Dourish, P.
2006   Implications for Design. *In Proceedings of Conference on Human Factors in Computing Systems (CHI)* 2006, Montréal, Canada.

Heiskanen, E. & Repo, P.
2007   User involvement and entrepreneurial action *Human technology*, 3(2): 167-187.

Porter, M. E.
1990   *The Competitive Advantages of Nations*. London: Macmillan Press LTD.

Rohn, J. A.
2007   How to Organizationally Embed UX in Your Company. *Interactions*, May-June:1-4.

Rosted. J.
2005   'User-driven Innovation – results and recommendations'. FORA.
          http://www.foranet.dk/upload/hovedrapport_engelsk.pdf accessed 16 June 2008

Schumpeter, J.
1934   *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.

Web resources

The Ministry for Economic and Business Affairs
http://www.ebst.dk/brugerdreveninnovation.dk/about accessed 16 June 2008

Rambøll Management
http://wwwupload.pls.ramboll.dk/dan/Publikationer/ForretningsudviklingOgInnovation/Innovationsspringet.pdf accessed 16 June 2008

European Commission 2005
http://ec.europa.eu/enterprise/enterprise_policy/sme_definition/sme_user_guide.pdf 16 June 2008

Danish Agency for Science, Technology and Innovation
http://fi.dk/site/forside/publikationer/2006/brugerdreven-innovation-baggrund-strategisk-forskning accessed 16 June 2008

SPIRE centre – University of Southern Denmark
http://www.sdu.dk/SPIRE

Dacapo theatre
http://www.dacapoteatret.dk/wm108807 accessed 16 June 2008

Strangers or Kin? Exploring Marketing's Relationship to Design Ethnography and New Product Development

SARAH JS WILNER
Schulich School of Business, York University

Marketers represent a particularly significant class of colleagues that corporate ethnographers must engage with, with a central role both in commissioning fieldwork and converting its findings into marketplace offerings. This paper explores the interaction between the two functions, asking, "What is the relationship between marketing and design ethnography and how does each function inform—or inhibit—the other?" A review of the various streams of academic literature related to marketing's role in product development and innovation is presented, with particular emphasis on scholars' growing attention to the cultural context(s) of consumption as well as the use of ethnography in consumer research. Consonant with the 2008 conference theme of (In)Visibility, the paper considers how the divergent perspectives of marketers and corporate ethnographers create mutual tension and can render each discipline "blind" to the value of the other's work.

INTRODUCTION

Corporate ethnographers, relatively new to the product development family, often feel more like adopted kin than blood relations to the marketers, product designers, and engineers with whom they work. Are such colleagues literally "un-familiar" with ethnography? If recent conference presentations, articles, and blog posts by practitioners of applied ethnography are any indication, many corporate ethnographers experience professional marginalization within what has traditionally been a highly positivist and "metric-focal" space. Whether by offering strategic advice for getting ethnographic analysis acknowledged and/or accepted by engineers and marketers (D'Hooge 2007); disassociation with marketing's reputation for "myth, fiction or spin" (Rodriguez 2007); or in calls to "consciously [play] with the shifting values of our fieldwork, our corporate expertise and cultural politics of our work [in order to] fruitfully engage with our colleagues" (Thomas and Lang 2007, p. 79), there is evidence of a persistent tension between the producers (ethnographers) and consumers (marketers, designers, engineers) of corporate ethnography.

Marketers represent a particularly significant class of colleagues that corporate ethnographers must engage with. Despite the integral role marketers can play both in commissioning fieldwork and converting its findings into marketplace offerings, to date there has been only limited consideration of the role that corporate or design ethnographers[1] play vis-à-vis the marketing function. While articles by Maish and Wesolkowska (2007) and Sherry (2007) represent notable exceptions, the former limit their discussion to what they

---

[1] Because this paper focuses on ethnography in the context of product development, the terms "corporate ethnography" and "design ethnography" are used interchangeably and refer both to in-house and outsourced ethnographic research.

term "marketing ethnography" (defined by a focus on brand strategy and innovation that does not consider product design and development) while Sherry (2007) only addresses ethnographers' experience of marketing's orientation indirectly.

As such, when marketing is considered at all, its perspective is regularly constituted by corporate ethnographers as out of touch with the realities of the very marketplace from which it derives its purpose. That this should be so is particularly striking considering that in both the marketing literature (cf. Kohli and Jaworski 1990; Narver and Slater 1990) and organization science literature (cf. Atuahene-Gima and Ko 2001), marketing is the functional area most closely associated with the consumer's needs and desires. The present discussion addresses this disjuncture by considering marketing's foundational paradigms and pursuits vis-à-vis corporate ethnography in an effort to reveal those activities that bridge the divide between marketing and corporate ethnography and those that widen it. Consonant with the 2008 conference theme of *(In)Visibility*, the paper examines the divergent perspectives of marketers and corporate ethnographers and how they can foster tension, rendering each discipline blind to the value of the other's work.

WHAT CLAN ARE YOU FROM? CONSUMER RESEARCH AND PRODUCT DEVELOPMENT

Influenced by the work of economist Joseph Schumpeter, who defined innovation as "setting up a new production function" (in Robertson 1967, p. 14), scholarly inquiry on innovation and new product development has been present in the marketing literature since the 1930s. For example, in a paper presented to the American Marketing Society[2] in 1936, Nash defined four activities associated with product development: laboratory research; product research, industrial styling and coordinated planning (Nash 1936). In an early recognition of the power of consumers still invoked today, he asserted:

> We are in and moving more strongly into a buyer's market where consumers will have more to say. What manufacturers think they would like to *sell* will have to compete with products designed to give consumers what they want to *buy* for better living (Nash 1936, pp. 254-5, italics in original).

Consumer research as a marketing sub-specialization is approximately forty years old. However, as in many fields, there is divergence on what constitutes consumer research—both ontologically and methodologically—as well as at least three streams of marketing

---

[2] Now the American Marketing Association.

scholarship that relate to product design: cognitive studies of consumer behavior; marketing strategy and consumer culture research.[3]

Researchers studying consumer cognition have been strongly influenced by the field of psychology. The unit of analysis is the individual, and laboratory experiments are the most common research method. Notably, given the influence of consumer psychology, studies by marketing researchers interested in cognition are not positioned as contributing to research on new product development *per se*. Rather, their research questions are more likely to consider how environmental (e.g. sensorial cues), product (e.g. shape, category) or personality attributes can affect consumer's processing outcomes such as perception, memory, learning, decision-making and emotion as they relate to products and services.

For example, Moreau et al. (2001)'s paper, "What is it? Categorization Flexibility and Consumers' Responses to Really New Products" uses two laboratory experiments with consumer subjects to consider how consumers use cues from different product categories to develop expectations and preferences for novel categories. The authors offer the example of Proctor & Gamble's Febreze™, a product designed to remove fabric odors, that, while technically a new category of product, could also be linked to the laundry detergent (because it works on fabric), or air freshener category (because they also eliminate odors), and demonstrate that consumers will associate new products with existing categories in order to evaluate them. This paper has implications for development teams working on innovative products, because physical attributes and packaging can be designed to guide consumers or to suggest one category over another and therefore position the product within a specific competitive landscape.

In contrast to consumer cognition research, scholars focusing on marketing strategy generally take the firm or market as the unit of examination and conduct multivariate statistical analysis on data gleaned from sources such as surveys of firm managers or industry activity data. This literature stream draws on constructs from the field of social psychology including trust, conflict, power and learning. In addition, economic theory is sometimes employed to understand the conditions and effects of marketplace transaction.

If marketing strategy has a "grand theory," it is probably *market orientation* (Narver and Slater 1990; Kohli and Jaworski 1990) and the related *market concept* (see Day 1994). The market concept says that to achieve strong performance, firms should identify and satisfy customers' needs and wants better than their competitors (cf. Kotler 1999). Accordingly, market orientation refers to a firm's behavioral and cultural activities directed at fulfilling the market concept (Narver and Slater 1990); in other words, *how* firms identify and satisfy consumers' needs and wants to gain competitive advantage. Related research has examined

---

[3]While market research is reflected in peer-reviewed journals such as the *Journal of Product Innovation and Management* and *Design Management Journal*, space does not permit inclusion of work from these and other interdisciplinary publications in the current literature review.

Strangers or Kin?

how firms gather and internally disseminate intelligence about the market; how they work to craft relevant responses to this knowledge and the effects that external factors such as technological turbulence have on their efforts (see Kirca et al. 2005 for a meta-analysis of this topic). Product development, design and innovation are relevant to market orientation because they reside at the heart of "satisfying customers' needs and wants." However, the objective of most innovation-focused studies is to determine how product design and development operates at the level of firm strategy rather than how to engage with consumers.

An illustrative example of this work is Im and Workman (2004). In "Marketing Orientation, Creativity, and New Product Performance in High-Technology Firms," the authors demonstrate that creating meaningful products (defined as being "appropriate" and "useful") is a stronger predictor of firms' financial performance and competitive advantage than merely novel products, but they do not offer guidelines for creating such products.

The third stream of marketing research—as well as the research perhaps most ontologically related to corporate ethnography—has come to be known as *consumer culture theoretics* (Arnould and Thompson 2005; 2007). This perspective construes individuals as meaning-producers and -consumers rather than information processing machines, and was a sharp departure from extant theorization when it was introduced by pioneers such as Sid Levy. In Levy's seminal article, "Symbols for Sale," (1959a), he articulated a radical new proposition for marketers to consider: "People buy things not only for what they can do, but also for what they mean." Levy was also among the first to argue that marketing could benefit from an anthropological perspective. Indeed, Levy credited the work of Levi-Strauss among his influences in his work on marketplace mythology (Harris 2007).

Despite prescient work by a limited group of marketing academics (cf. Levy 1974; Sherry 1983; Belk et al. 1988) as well as scholars in other disciplines (cf. Douglas and Isherwood 1979; Miller 1987), it was not until postmodernism and reflexive scholarship gained momentum in the late 1980s that an increasing numbers of marketing scholars warmed to the concept of consumption as a contextually-situated social act. More than twenty years later, while the interpretive research tradition has a first-tier journal "market share" of only approximately 20% (Simonson et al.), there has, nevertheless, been a "flurry of research addressing the sociocultural, experiential, symbolic and ideological aspects of consumption" (Arnould and Thompson 2005 p. 868), with more than fifty ethnographic studies published in the *Journal of Consumer Research* since 1988 (Fischer et al. 2008), Newer journals, such as the *Journal of Consumer Culture* and *Consumption, Markets & Culture* feature even more research in this tradition.

However, like research in consumer cognition and market strategy, little work in consumer culture theoretics takes the design of products as its primary research objective or context. Instead, it focuses on the "commercially produced images, texts and objects that groups use—through the construction of overlapping and even conflicting practices, identities and meanings—to make collective sense of their environments and to orient their

members' experiences and lives (Arnould and Thompson 2005; Kozinets 2001). Only rarely have explicit connections between ethnography and product development been drawn in the consumer culture literature (cf. Elliott and Elliot 2003; Arnould and Wallendorf 1994; Arnould and Price 2006; Thorpe 2003). For example, in "Market-Oriented Ethnography: Interpretation Building and Marketing Strategy Formulation," Arnould and Wallendorf (1994) describe conceptual and methodological issues surrounding ethnography, and provide examples of scholarly studies which explicate the managerially-relevant use of thick description (Arnould and Price 1993), thick transcription (Wallendorf and Arnould 1988) and thick inscription (Schouten and McAlexander 1995), respectively.

COMING OF AGE IN MARKETING

Despite the extensive and rich marketing literature and its growing appreciation for contextualized, naturalistic research, most academics' contribution to marketing is limited to theory, as few scholars have lived experience as corporate managers (Simonson et al. 2001). Therefore, in considering the dynamics between marketing managers and design ethnographers it is helpful to examine the socialization process (educational training) that prefigures their interaction.

Marketing is taught at both the undergraduate and graduate levels, but, excluding doctoral programs, most American and Canadian schools offer marketing as a concentration within broader business programs rather than a program unto itself. In fact, the terminal degree for most marketing managers (as opposed to market researchers) is a Masters of Business Administration (MBA), which is a professional degree. The MBA differs from the less common (in North America) Master of Science in Management degree because it does not require a thesis and as such, places less emphasis on theory. A typical full-time MBA program is two years and is structured by foundational coursework across functional areas of management in the first year (e.g. finance, accounting, operations, organizational behavior, human resources, marketing, strategy), with coursework in the area of concentration and elective opportunities in the second year. Because most MBA programs require prior work experience but do not limit admission to applicants with previous business education, first-year introductory courses are true to their label and assume no previous experience with their subject area.

Common marketing course topics include supply chain management; services marketing, sales force management, consumer behavior and market research as well as advertising and new product development. American business schools typically offer a marketing curriculum based on textbook material, case studies, books and articles from the "popular" press and occasionally, software-enabled market simulations. It is rare for either undergraduate or graduate students to read extensively from academic journal articles or to conduct theoretic (i.e. versus industry-level) research, although such material is certainly trickled down to them via textbook content drawn from research published in scholarly publications. Based on a review of a top professional association's resource bank for

Strangers or Kin?

members which includes exemplar course syllabi, with few exceptions marketing is overwhelmingly taught as a quantitative topic and with an epistemologically positivist orientation (American Marketing Association Academic Resource Center 2008).

The self-conceptualization of marketing management, therefore, is that it is an analytic, rather than theory-driven, function. Moreover, taught within a "normal science" paradigm (Kuhn 1962), the attendant assumption is that the analysis conducted within this rubric is inherently unbiased and predicated on "objective" (historic) data sources including consumer surveys, scanner (sales) data and census demographics, among others. To aid in forecasting, students are also commonly taught calculations and introduced to statistical models whose output is regarded as predictive of consumer behavior and/or reliable aids to decision making, for example, formulas for inferring utility or predicting the diffusion of new products (cf. Urban and Hauser 1993).

SIBLING RIVALRY

This identity of marketer-as-detached-analyst is highlighted for two reasons. First, it stands in stark contrast with ubiquitous perspectives of the profession and its practitioners as manipulative persuaders. Marketing is often believed to be synonymous with advertising and, as the function associated with mediating interactions between the firm and its customers (Ulrich and Eppinger 2008), has a reputation for privileging so-called "soft skills," and drawing managers with "creative" versus "scientific" interest and instincts. Indeed, my experience with MBA students from educational backgrounds in areas such as engineering and accounting is that they consider marketing to be less rigorous and "more intuitive" compared to their own training.

Marketing practitioners are regularly vilified in the media as corporate puppeteers with ulterior motives, determined to persuade consumers to buy things they don't want or need. While this is sometimes attributed to the advertising industry's mid-century work with psychologists and popular books of the time, particularly Vance Packard's *The Hidden Persuaders* (1957), marketing-bashing has evolved into a rhetorical art, with books such as Naomi Klein's *No Logo: Taking Aim at the Brand Bullies* (2000); Barber's *Consumed: How Markets Corrupt Children, Infantilize Adults, and Swallow Citizens Whole* (2007) and assertions that marketing creates and facilitates "America's suicidal consumer binge" (Lasn 1999) perpetuating the discourse. In this "cultural authority narrative," marketers are "portrayed as cultural engineers, organizing how people think and feel through branded commercial products" (Holt 2002, p. 244).

The second reason for emphasizing the formal education of marketing administrators is to contrast it with that of many design ethnographers, who (based on a survey of conference presentations, user groups and blogs related to design ethnography) predominantly hail from the fields of anthropology (e.g. Susan Squires, Melissa Cefkin, Jay Hasbrouk, Elizabeth Tunstall), sociology (e.g. An Jacobs, Sam Ladner, Nina Wakeford, Nick Agafonoff) and

psychology (e.g. Elizabeth Churchill, Tony Salvador), implying that their training (commonly undertaken at the doctoral level) was theory-driven. It is also noteworthy that disciplines such as anthropology have undergone the kind of reflexive philosophical interrogation (cf. Marcus and Fischer 1986) that demands of its community both awareness and conscious affiliation with an ontological commitment, something marketing managers are unlikely to have (and despite the fact that such assumptions drive their research projects and privilege their expectations).

The resulting disparity of subject positions between marketing managers and corporate ethnographers produces distinctive frames for marketing managers—trained as analytic administrators (i.e. plan, goal and action-orientated)—and corporate ethnographers, who trained as analytic mediators (i.e. interpretation, reflection and theory-oriented). Yet productivity on design teams and projects—from design brief, to data collection, to sense making, to product development, to the notion of productivity itself—depends, in part, on common frames of reference.

Scholars of organizational identity emphasize that while professional self-concept might be partially formed within formal settings such as educational or organizational institutions, it is strengthened and revised through role enactment and performance (cf. Simpson and Carroll 2008; Beech 2008). With this in mind, it is useful to note that many marketing managers experience a complex and potentially conflicting set of role expectations that may influence their behavior. Most have multiple responsibilities and conduct analysis at multiple levels and temporal frames. These include management of and communication with external constituencies (consumers, suppliers, consultants) as well as accountability to internal constituencies. Marketers are often asked to conduct both short- and long-term strategic planning as part of brand, geographic and functional units, and they may have financial responsibility for activities measured over incompatible time periods (e.g. quarterly reports versus the duration of a product development cycle). Moreover, marketers are required to integrate these multiple levels and frames of knowledge into coherent yet essentialized output such as market segmentation reports; strategic plans and promotional campaigns that will deliver emotional resonance for end consumers and positive return on investment for senior managers. These wide-ranging activities call for both quantitative and qualitative analysis, although the latter skills are rarely taught.

Given the ever-narrowing window of competitive advantage, corporate ethnographers have been adopted into this familial maelstrom. Although marketers have little incentive to publicly disavow the value of ethnography (they are, after all, devoting limited time and economic resources to it), most are less familiar with the theoretical orientations that underpin its practice than with its portrayal in the media (see Suchman 2007) or at product management conferences, where ethnography is presented as carnival magic: "Watch, as the consumer in front of you reveals the meaning of products!" While marketers' attraction to the notion of ethnography as silver bullet (or "miracle," see Wakeford 2006, p. 95) may seem naïve, it should be remembered that many are simply enacting a link in a value chain

constructed, in part, by assertions made by design ethnographers themselves: Insight →
Epiphany → New/Differentiated product → Competitive advantage (cf. Reese 2004;
Sanders 2004; Mariampolski 2006).

It is not surprising that magical powers are invoked by popular terms such as
"consumer insight." Dramatic changes including globalization, novel communication
technologies and their attendant cultural practices have made it increasingly clear that the
postmodern consumer is a knowledgeable and powerful force to be reckoned with. Far from
the days when the customer could have a car in any color as long as it was black, marketers
have even abandoned rhetoric related to "harnessing consumer desire," replacing it with an
"innovate or die" rallying cry. So it is that the Product Development and Management
Association has held an annual "Voice of the Customer" conference for more than a decade
and the *Journal of Product Innovation and Management* recently published its first paper devoted
to the benefits of ethnography in product development (Rosenthal and Capper 2006).

Indeed, many marketers have embraced the anthropological adage to "make the strange
familiar and the familiar strange." However, with their blind enthusiasm comes a risk of
misconstruing ethnographic techniques and undervaluing both the resulting data and the
complexity of analysis required for sense-making (Masten and Plowman 2003).

An example of this can be seen in a recent newspaper report of a prominent packaged
food company's deployment of cultural anthropologists to discover new markets. In the
article, the executive accountable for the initiative recounts a conversation he had with a
woman which took place at her kitchen table in Russia. He is quoted as saying, "Her eyes lit
up, she leaned across the table and for the next 30 minutes she told me what soup she likes
and how she makes it. You'd think I'd asked her about her kids" (Jargon 2007).

This excerpt highlights several problems, not least of which is the invisibility of the
ethnographer(s) facilitating the ride-along. Just as troubling is the executive's patronizing
attitude towards the informant: he appears surprised to discover that some consumers are
engaged with and passionate about his company's product category, yet does not seek to
understand why that might be the case. Like many product managers, he may have literally
and figuratively "bought in" to the notion of corporate ethnography, but not yet learned to
appreciate its subtlety or power.

For their part, corporate ethnographers, like the marketing managers who might
obscure their contributions, also experience a complex and potentially conflicting set of role
expectations (van Veggel 2005). Wakeford (2006) notes that "in doing EPIC work…many of
us have found ourselves in contradictory positions, in relation to our discipline, our politics
or our collaborators" (ibid, p. 94). Indeed, the discourse among corporate ethnographers in
the material reviewed for the current article reveals pervasive tension and ambivalence about
their identity as anthropologists versus corporate employees.

This may be because their "anthropologist identity" is an intellectual one, privileging both academic inquiry as an end unto itself and the relatively contemporary anthropological tradition of advocacy on behalf of vulnerable informants (cf. Ablon 1982). On the other hand, the "product developer identity" is seductive: employment options are potentially more stable, local, plentiful, lucrative and even prestigious than opportunities in academia. In this sense, self-concept is compromised whether corporate ethnographers cast a romantic gaze upon their academic lives (Wilkens 2007, Thorpe 2003) or step forward to embrace a profession accused of fostering materialism and facilitating the homogenization of global cultures.

This Us (ethnographers) versus Them (marketers) ambivalence is evident in Sherry's (2007) description of a "typical" research project and the relationship between a firm's ethnography team and product development administrators. Sherry, an anthropologist, bemoans the insignificance of design ethnography and expresses reservations about its value, since its merit is apparently defiled by commercial interest. At the same time, his text reveals a hint of longing for the value that his labors might have if his assignment had wider legitimacy and greater appreciation.

> The research team comes back and identifies some very interesting patterns in the data, proceeds to tell the suits/engineers/product planners that they were thinking about things all wrong […] And then what? What of true lasting value comes of all this effort? One or two insights might prove useful for whatever is the innovation *du jour*, complete with a pat on the back and a flurry of requests to use some of our pictures, quotes or insights for promotional materials.

> [Fellow…] researchers have taken great pains to point out that the normative/management perspective is at best partial, and have demonstrated how it rendered invisible the real, concrete contributions that actually enable the persistence of the structures that Biz School colleagues hold so dear (Sherry 2007, pp. 21-22).

Note the use of a diminutive epithets for management ("Biz School colleagues"; "suits") and the implicit assertions that managers' fatal flaws include both satisfaction with a myopic understanding of consumers (the "partial" truth of their perspective); as well as a preference for institutionalized structure that obfuscates the "real" and "concrete" contributions of ethnographers. In this way, the perspective of Sherry's managerial colleagues is framed as both misguided and destructive. A similar dialectic tension surfaces on the blog of an EPIC 2007 attendee, as the writer notes the incommensurability of that which marketers and corporate ethnographers value:

> How can ethnographers convince managers and marketing leaders to take them seriously? How do they justify their work both intellectually (methods, data, etc.) and also from a business perspective (actually leads to better business processes or products? Complicating this

argument is the perceived conflict between the reductionist, abstract models that managers and marketing professionals want and the rich, individual "thick" and nuanced descriptions that ethnographers value and provide. (blog post, October 5, 2007)

As a final illustration, on an online discussion forum of design ethnographers, one contributor's post reveals a strongly held belief that ethnography is distinct from marketing research.

If you spend weeks with some family living in their house and the end representation is a marketing customer lifecycle from awareness to loyalty, then you did marketing research, not ethnography. If you spend weeks with the family and come back to the client and can/are willing say that "You're products don't fit into the lives of these people and they don't want you to come because you disrupt their local markets," then, that's an ethnography (if that's what the people really feel). (posted July 10, 2008)

The contributor's closing remarks expose a possible source of unease, framing ethnography as the more accurate reading of informants' experiences. Indeed, the writer poignantly infers that unlike marketers, who are bound to see a receptive audience even where there is none, ethnographers are not afraid of "the truth."

These illustrative passages are not intended to increase tension between marketers and design ethnographers, but rather to demonstrate that each community frames the other's contribution in ways that minimize its value or renders it invisible. Of course in practice, both disciplines have valuable perspectives, ways of knowing and professional objectives.

CONCLUSION

The preceding discussion illustrates how tension between design ethnographers and marketing managers may result from:

1. Differing levels of analysis
2. Divergent theoretic assumptions, particularly about the "appropriate" use and type of data needed to make productive decisions
3. Varying expectations on both the process and product of consumer research
4. The potential role conflict experienced by each.

This exploratory analysis is an initial step in a multi-phase project examining the role of corporate interpretation of informant data in the product design and development process. Future stages of the planned research emphasize depth interviews with all relevant stakeholders as well as fieldwork within firms using ethnographers in the design process.

As corporations increasingly encourage and enable a "seismic shift in the location and integration of ethnography within the consumer research world," (Sunderland and Denny 2007), it is more relevant than ever before to examine ethnographers' relationship with other corporate stakeholders such as marketers whose function is equally—albeit differently—grounded in the analysis and interpretation of consumers' actions and desires. Uncovering the causes of mutual apprehension, whether due to lack of familiarity or misaligned ontological assumptions, can contribute to corporate ethnographers' ability to engage in productive discourse with marketers in the product development process.

REFERENCES

Ablon, Joan
1982   Field Method in Working with Middle Class Americans. In *Anthropology for the Eighties: Introductory Readings*. Johnnetta B. Cole, editor. Pp. 38-43. New York: The Free Press.

American Marketing Association Academic Resource Center
http://www.marketingpower.com/Community/ARC/Pages/Teaching/Syllabi/default.aspx
Accessed 11 July 2008.

Arnould, Eric J. and Linda L. Price
2006   *Market-Oriented Ethnography Revisited.* Journal of Advertising Research.
1993   *River Magic: Extraordinary Experience and the Extended Service Encounter.* Journal of Consumer Research. 20(1):24-45.

Arnould, Eric. J. and Craig J. Thompson
2007   *Consumer Culture Theory (and We Really Mean Theoretics): Dilemmas and Opportunities Posed by an Academic Branding Strategy*," in Russell W. Belk and John F. Sherry, Jr., eds. Research in Consumer Behavior, Vol. 11: *Consumer Culture Theory*, Oxford: Elsevier.
2005   *Consumer Culture Theory (CCT): Twenty Years of Research.* Journal of Consumer Research, 31(4):868-882.

Arnounld, Eric J., and Melanie Wallendorf
1994   *Market-Oriented Ethnography: Interpretation Building and Marketing Strategy Formulation.* Journal of Marketing Research. 31(4): 484-504.

Atuahene-Gima, Kwaku and Anthony Ko
2001   *An Empirical Investigation of the Effect of Market Orientation and Entrepreneurship Orientation Alignment on Product Innovation.* Organization Science. 12(1):54-74.

Barber, Benjamin R.

2007   *Consumed: How Markets Corrupt Children, Infantilize Adults, and Swallow Citizens Whole.* New York: W. W. Norton and Company.

Beech, Nic
2008   *On the Nature of Dialogic Identity Work.* Organization. 15(1):51-74.

Belk, Russell W., editor.
1991   *Highways and Buyways: Naturalistic Research From the Consumer Behavior* Odyssey. Provo, UT: Association for Consumer Research.

Belk, Russell W., John F. Sherry Jr. and Melanie Wallendorf
1988   *A Naturalistic Inquiry into Buyer and Seller Behavior at a Swap Meet.* Journal of Consumer Research. 14(4):449-470.

D'Hooge, Herman
2007   *From Ethnography to Market: It Takes More Than "Add Users and Stir."* Presentation at the Annual Meeting of the Marketing Science Institute, October 15.

Day, George S.
1994   *The Capabilities of Market-Driven Organizations.* Journal of Marketing 58(4): 37-52.

Douglas, Mary and Baron Isherwood
1979   *The World of Goods.* New York: Basic Books, Inc.

Elliott, Richard Nick Jankel-Elliott
2003   *Using Ethnography in Strategic Consumer Research.* Qualitative Market Research. 6(4):215-223.

Fischer, Eileen, Robert V. Kozinets, Marie-Agnes Parmentier and Sarah J.S. Wilner
2008   *Strategies for Developing Theoretical Contributions from Ethnographic Research.* Research in progress, York University, Toronto.

Harris, Garth E.
2007   *Sidney Levy: Challenging the Philosophical Assumptions of Marketing.* Journal of Macromarketing. 27(1):7-14.

Holt, Douglas B.
2002   *Why Do Brands Cause Trouble? A Dialectical Theory of Consumer Culture and Branding.* Journal of Consumer Research. 29(1):70-90.

Im, Subin and John P. Workman, Jr.
2004   *Market Orientation, Creativity, and New Product Performance in High-Technology Firms.* Journal of Marketing. 68:114-132.

Jargon, Julie
2007   *Campbell Adds Research to Recipe. Wall Street Journal,* International Edition. July 9.

Kirca, Ahmet H., Jayachandran, Satish and William O. Bearden
2005   *Market Orientation: A Meta-Analytic Review and Assessment of Its Antecedents and Impact on Performance*. Journal of Marketing, 69:24-41.

Klein, Naomi
2000   *No Logo : Taking Aim at the Brand Bullies.* New York: Picador.

Kohli, Ajay K. and Bernard J. Jaworski
1990   *Market Orientation: the Construct, Research Propositions, and Managerial Implications.* Journal of Marketing. 54(2): 1-19.

Kotler, Philip
1999   *Marketing Management.* 10th edition. New Jersey: Prentice Hall.

Kozinets, Robert V.
2001   *Utopian Enterprise: Articulating the Meanings of Star Trek's Culture of Consumption.* Journal of Consumer research 28:67-88.

Kuhn, Thomas
1962   *The Structure of Scientific Revolutions.* Chicago: University of Chicago Press.

Lasn, Kalle
2000   *Culture Jam: How to Reverse America's Suicidal Consumer Binge—And Why We Must.* New York: HarperCollins.

Levy, Sidney
1974   *Myth and Meaning in Marketing.* In *Brands Consumers, Symbols & Research: Sidney J. Levy on Marketing*, Dennis Rook, editor. 241-246. Beverly Hills: Sage.
1959a   *Symbols for Sale.* Harvard Business Review. 37:117-124.

Maish, Amy and Magda Wesolkowska
2007   *Not Lost in Translation: Maximizing Impact in Marketing Ethnography through Bivocality.* In Proceedings of EPIC 2007. Washington, DC: American Anthropological Association. 296-309.

Marcus, George E. and Michael M. J. Fischer
1986   *Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences.* Chicago: University of Chicago Press.

Mariampolski, Hy.

2006   *Ethnography for Marketers: A Guide to Consumer Immersion.* Thousand Oaks: Sage
            Publications.

Masten, Davis L. and Tim M.P. Plowman
2003   *Digital Ethnography: The Next Wave in Understanding the Consumer Experience.* Design
            Management Journal. Spring:75-81.

Miller, Daniel
1987   *Material Culture and Mass Consumption.* Oxford: Basil Blackwell.

Moreau, C. Page, Arthur B. Markman, and Donald R. Lehmann
2001   *"What Is It?" Categorization Flexibility and Consumers' Responses to Really New Products.*
            Journal of Consumer Research. 27:489-498.

Nafus, Dawn and Ken Anderson
2006   *The Real Problem: Rhetorics of Knowing in Corporate Ethnographic Research.* In Proceedings
            of EPIC 2006. Washington, DC: American Anthropological Association. 244-258.

Narver, John C. and Stanley F. Slater
1990   *The Effect of a Market Orientation on Business Profitability.* Journal of Marketing. 54(4):
            20-36.

Nash, Ben
1936   *Product Development: Designing for Old and New Products.* Presentation to the Annual
            Convention of the American Marketing Society, November 28.

Packard, Vance
1957   *The Hidden Persuaders.* Indianapolis: Cardinal Press.

Reese, William
2004   *Ethnography for Business: Optimizing the Impact of Industrial Design.* Design Management
            Review. Spring:53-59.

Robertson, Thomas S.
1967   *The Process of Innovation and the Diffusion of Innovation.* Journal of Marketing 31: 14-19.

Rodriguez, Diego
2007   *When Design Thinking Meets Marketing.* Presentation at the Annual Meeting of the
            Marketing Science Institute, October 15.

Rosenthal, Stephen R. and Mark Capper
2006   *Ethnographies in the Front End: Designing for Enhanced Customer Experiences.* Journal of
            Product Innovation Management. 23:215-237.

Sanders, Elizabeth B.-N.
2004   *Ethnography and the Empowerment of Everyday People.* White Paper for Microsoft
        Corporation, May.

Schouten, John W. and James H. McAlexander
1995   *Subcultures of Consumption: An Ethnography of the New Bikers.* Journal of Consumer
        Research. 22(1):43-61.

Sherry, John W.
2007   *The Cackle of Communities and the Managed Muteness of Market* In Proceedings of EPIC
        2007. Washington, DC: American Anthropological Association. 21-35.

Sherry Jr., John F.
1983   *Gift Giving in Anthropological Perspective.* Journal of Consumer Research. 10(2): 157-
        168

Simonson, Itamar, Ziv Carmon, Ravi Dhar, Aimee Drolet and Stephen M. Nowlis
2001   *Consumer Research: In Search of Identity.* Annual Review of Psychology. 52:249-275.

Simpson, Barbara and Brigid Carroll
2008   *Re-veiwing "Role" in Processes of Identity Construction.* Organization. 15(1):29-50.

Sunderland, Patricia L. and Rita M. Denny
2007   *Doing Anthropology in Consumer Research.* Walnut Creek, CA: Left Coast Press.

Suchman, Lucy
2007   *Anthropology as "Brand": Reflections on Corporate Anthropology.* Paper presented at the
        Colloquium on Interdisciplinarity and Society. February 24.

Thomas, Suzanne L. and Xueming Lang
2007   *From Field to Office: The Politics of Corporate Ethnography.* In Proceedings of EPIC 2007.
        Washington, DC: American Anthropological Association. 78-90.

Thorpe, Mark
2003   *Virtual Connections: Representation and Commercial Qualitative Research.* Qualitative
        Marketing Research: An International Journal. 6(3):184-193.

Ulrich, Karl T. and Steven D. Eppinger
2008   *Product Design and Development.* 4th Edition. Boston: McGraw-Hill.

Urban, Glen L. and John R. Hauser
1993   *Design and Marketing of New Products.* 2nd edition. Englewood Cliffs: Prentice-Hall.

van Vaggel, Rob J.F.M.

2005   *Where the Two Sides of Ethnography Collide.* Design Issues. 21(3): 3-16.

Wakeford, Nina
2006   *Power Point and the Crafting of Social Data.* In Proceedings of EPIC 2006.
            Washington, DC: American Anthropological Association. 94-108.

Walker, Mary C.
2008   post to anthrodesign@yahoogroups.com, April 22, 2008.

Wallendorf, Melanie and Eric J. Arnould.
1991   *"We Gather Together": Consumption Rituals of Thanksgiving Day.* Journal of Consumer
            Research. 18 (1): 13-31.

Wilkens, Todd
2007   *Pseudo-ethnography.* Post to www.adaptivepath.com. March 19.

The Politics of Visibility: When Intel hired Levi-Strauss, Or So They Thought

ROGÉRIO DE PAULA
Intel Corporation, Brazil

VANESSA EMPINOTTI
University of São Paulo, Brazil

This paper examines the politics of visibility – the ways in which the work of ethnographers is positioned inside and outside organizations not only as means of unpacking the "real-world" but often as means to create business and marketing differentiation. We contend that the institutional embeddedness of ethnographic practices shapes "the where," "the who," "the what," "the how," and "the when" of doing ethnography. Thus, the choice of sites, who and what researchers choose to make 'visible,' the narratives about the field, and how and when they tell them are not without political and business weights. To examine visibility as this political question, we shifted our gaze from ethnography as a methodology and practice to ethnography as a part of a broader business and marketing discourse and strategy. Specifically, we explore a few particular encounters with the field and the organization that took place in course of two studies conducted in Brazil.

> "While their functions and sources of authority as experts are quite different from journalists, anthropologists often function nowadays like the best and deepest journalists—certainly their experiences of other places, of sites of research and reporting, are similar today." George Marcus (2008)

INTRODUCTION

When asked whether the contemporary world with its oft-televised "clashes of cultures" needs more anthropologists, George Marcus (2008) responded positively. He nonetheless added that we do not necessarily need those "à la Malinowski or Boas" (or Lévi-Strauss, for that matter), for they most likely would not be prepared (epistemologically and methodologically) to adequately study and have significant insights about today's world complexities. He goes on asserting that such a mode of ethnographic knowing and doing – journalistic of sorts (see above quote) – sets ethnographers to deliver their intimate views of the field, but not necessarily in a critical manner which questions and unearths the entanglements of doing ethnographic fieldwork. It has been over two decades since Clifford and Marcus' *Writing Culture* (1986) and Marcus and Fischer's *Anthropology as Cultural Critique* (1986) marked a turn toward a broader awareness of the representation problem, anthropologist's authority, and fieldwork politics. However, we – the imagined 'we' of social scientists, designers, and related professionals doing ethnographic work in the industry that Nafus and Anderson trenchantly unsettled in their 2006 EPIC paper – still find ourselves presented with a predicament: while the (market and business) possibilities that ethnography can bring to bear to business still dazzle us, the full extent of ethnography's entanglements has not been fully realized, let alone appreciated.

This idea challenges us to question that maybe our emblematic, unproblematic epistemic (and methodological) commitments of detangling, unpacking, unveiling "real people's real needs and wants" – making the strange become familiar – are a myopic take on the role and value of ethnography. As Nafus and Anderson (2006) put it, such a discursive marker, which "we ourselves have created to persuade others to grant us positions that historically have seemed implausible" (p.244), has taken us thus far to a place where ethnography has been embraced and become a legitimate, common practice as well as part of a firm's marketing repertoire of caring about and understanding "our clients." At the same time, the reification of such a reductionist notion of ethnographic knowing and doing – "butterfly collecting" – risks limiting (and even hampering), on the one hand, the ways in which we can contribute to product development, marketing and business strategy, and on the other hand the kinds of 'research' work we are asked to perform and how.

However, we do not wish here to rehash this discussion vis-à-vis the meanings of ethnography in the industry, the ways in which ethnography has been constituted internally through discourses of "real people, real needs. The entanglements of ethnography knowing and doing have been discussed extensively elsewhere [e.g., in the context of research consultants and clients (Sunderland and Denny, 2007) and ethnographers in the organization (Nafus and Anderson, 2006, Baba 2005)]. Instead, we shift our attention to the ways in which the industry constructs notions of ethnography as a means to unveil new market opportunities and as part of its broader business and marketing discourses and strategies. In other words, as ethnography practices become part and parcel of current business "grand narratives" of understanding and addressing customers' needs; they are in turn shaped by corporate practices, values, and discourses – they become institutionalized. This institutional embeddedness of ethnographic practices in turn shapes "the where," "the who," "the what," "the how," and "the when" of doing ethnography. The choice of sites, who and what researchers choose to make 'visible,' the narratives about the field, and how and when they are told are not without political and business weights. In other words, the choices of visibility become political and economic questions.

This paper thus examines the politics of visibility – the ways in which the work of ethnographers is positioned inside and outside organizations not only as means of unpacking the "real-world," but as means to create business and marketing differentiation. In particular, we explore the specific dynamics between research, field and organization using two specific examples from our own research during two separate studies conducted in Brazil. These examples underscore the dual nature of visibility – the visibility of ethnographers themselves and the visibility of their work, inside and outside the corporation – as well as the choice of which things to make visible. To analyze these situations, we utilize feminist notions of field positionality and reflexivity. We contend that the visibility of ethnographers is no longer just a matter of how they position themselves relative to the field, people, and local cultural practices and values, but how ethnographers are positioned (and their identity rendered) in the field as a result of complex interactions among business goals, people's intents, and their research aims. In other words, in the field, ethnographers not only work for the company

and do research, but they are subjectified by it (in Foucault's language) where their visibility or invisibility reflects the images with which people and the business endow them.

ETHNOGRAPHIC (BUSINESS) ENCOUNTERS

Central to the discussion of visibility is the positionality of ethnographers in doing fieldwork and analyzing their field experiences. In contrast to the classic 'outsider' framework, where an ethnographer is positioned in respect to and opposition to the 'other' (the insider), increasingly a more fluid notion of positionality is undertaken. As a 'positioned subject' (Hastrup, 1992), the ethnographer's identity (and consequently his/her practices) is constituted and shaped through encounters with the business and the field that take place before, during, and after the fieldwork. For better or worse, the creation of this ethnographic brand by the industry (Nafus and Anderson, 2006) has in part rested on the auspice of "real people's real problems" – a manifest marker of a firm's interests in understanding their customers. This perspective positions us, ethnographers, as "the link" between the business and the outside reality, and consequently shapes the business expectations concerning what ethnographic research is all about as well as the types of deliverables and influences we are supposed to offer. On the other hand, our positionality in the field is shaped by the ways in which we perform and display our research and work relations, and in turn the perception of who we are (or what we represent) shapes how people (or subjects, or users) engage with us.

From the choices of sites, participants, and questions to the actual conducting of the ethnographic work, fieldwork is not without the influence of an economy of power relations[1]. Sunderland and Denny (2007) discuss the politics of segmentation when selecting 'authentic' subjects and researchers. They described the trajectory through which subjects and fieldwork were shaped by preconceived notions of race and ethnicity (in terms of skin color, native language, authentic culinary, (low!) income group, and other categories.) and authentic interactions (e.g., research conducted by researchers of the same 'racial group' as those researched). In doing research in the industry, particularly at a global scale, sites as well as 'users' are subject to business 'interests' and perceptions, which shape as well as limit the range and types of ethnographic possibilities. Geographies are contingent on and defined by business interests (i.e., possibilities of revenue growth) and categories (i.e., market segmentations), as the 'classic' division of the world market into the 'US' and the "rest of the world" categories (Nafus and Anderson, 2006).

In the politics of visibility, the strange and unique to be revealed is no longer 'the local' alone, but ethnographers themselves. They become the subject of and subject to inspection by their "local subjects" as well as marketing strategists. This by and large shifts researchers' positionality in the field. In addition, our multi-sited ethnographic efforts do not simply follow the 'issue,' by means of a thread of established logical associations among sites, as

---

[1] Borrowing this notion from Foucault's work, namely, the ways in which research participants and researchers as well are made subjects

defined by Marcus (1995) – as though research choices were devoid of power relations – but often follow the 'business.' In all these respects, the choices of what, who, and when to make visible (or invisible for that matter) is as much a research concern as an economic and political one.

On the other hand, when conducting fieldwork we often encounter situations in which our presence and interaction with informants impacted and was impacted by local power relations. These types of concerns are related to power differences between researchers and researched, thoroughly discussed by feminists and post-structural researchers in terms of reflexivity and positionality (England 1994; Wolf 1997; Crag 2005). The importance of reflexivity is not just that it contextualizes and deepens interpretations for exploring the politics of knowledge production and the social processes that knowledge produces, but that it also assists in questioning how things are conducted. In particular, reflexivity suggests that researchers diligently and systematically reveal their methods, encounters, and themselves as instrument of data generation and analysis. In addition, researchers must also reflect on the ways in which their choices (of data selection/representation, medium of communication, issue/subject visibility, for example) impact how their research audiences construct the meanings of the work (and draw conclusions thereof) and how those researched are in turn affected (or may be affected) by it [Sunderland and Denny (2007) discuss reflexivity based on Ruby's work (2000)].

Reflexivity suggests a critical analysis of the ways in which different identities are endowed to researchers during fieldwork as well as the political and power natures of researcher's relationships with their informants and those researched [Landes (1994) and Goldstein (2003) for rich accounts of the complex nature of such relationships]. Elsewhere, Empinotti (2007) discusses how the use of multi-sited ethnography allowed her to work with different informants and to meet many research subjects, and consequently created the opportunity to observe how these interactions influenced data collection. In order to understand the processes of differentiation between researcher and researched, Empinotti discussed positionality in three circumstances: how she, as a researcher, became part of the social structures of power present in the sites where she conducted her fieldwork; how the interviewees' expectations toward the impact of her work in their lives influenced their answers; and how the recognition of commonalities between herself (as a Brazilian woman) and the researched influenced their answers. In a somewhat similar fashion, Halstead (2001) describes the fluidity of her positionality (and her 'self') in the field as dynamically and contingently constructed and negotiated by those researched according to their own interests. Both studies significantly demonstrated how being an ethnographic subject (i.e., the focus of outside interests – "why would someone care about us?") was appropriated by those researched (and informants for that matter) as a manifest means to perform and confer status and power, locally.

People are not 'blind' to who we are as researchers (and industry representatives), what we do (or should do from their perspective), and how it impacts (or should impact) their lives. In fact, informants actively manage and negotiate our work in the field, for instance,

they organize the research settings (select subjects or sites) according to their perception of the impact of the research on, say, their power relations (or status) with the local community in question, or on the community in general. After the third site visit, working with the same informant as part of an ongoing research project in Salvador, Brazil, de Paula's informant told him that one of the reasons he chose to bring the research team to that particularly poor community was in the hope that by doing so 'outside world' would become aware of this community's everyday reality and "do something about it." He was rather surprised when the mother of those interviewed, who at that time was living in a "palafita" (a slum shack hanging over the water), blatantly told de Paula that he should only return after he had something to give them (she was categorical on saying something to "give" as opposed to "offering"). By making his choices public, this informant in fact greatly influenced the interpretation of the research and analyses.

Recruiting can also be subject to political choices, both at organization and local arenas. The economics of the market segment determines which groups will be counted as research subjects. That is to say, the ways in which organizations class people according to business interests, strategies, and technologies, socio-demographic and market indicators, and broader socio-economic discourses influence what and who to be rendered visible or invisible. For instance, almost half of the world's population turned visible to businesses as their category shifted from 'the poor' to consumers. As a result, new business strategies and new technologies were devised to address the new market opportunities, which in turn demanded more research to understand this newly 'emerging' category. On the other hand, the local choices of participants are also subject to local politics – power hierarchies and strategies. Time and again the difficulties in reaching participants beyond key stakeholders have to do with local power strategies, for instance, stakeholders wielding power by controlling the access to as well as selecting participants (Empinotti, 2007).

In deconstructing ethnographic encounters – prior, during, and after fieldwork – we do not attempt here to make any assertion of the validity of ethnographic work, nor of the merits of academic ethnographic work over those in the industry. Instead, we are interested in reflecting upon and investigating the entanglements of ethnographic doings and knowing (see Sunderland and Denny, 2007) for a reflexive and honest discussion of common realities and dilemmas of fieldwork. In what follows, we will narrate and discuss two particular experiences of researchers being made subjects – "positioned subjects" – in the field. In one study, we explore the ways in which the company's PR created a "media hit" by exposing to the press de Paula's ethnographic work of during "Campus Party" – a week-long event where "geeks" of all sorts camp, network, blog, crack codes, share war-stories, and the like. The ethnographic work was taken and dealt with as a business differentiation that spurred media attention, and curiosity of sorts, and create "free PR." In the other study, we explore Empinotti's positionality as a result of people's attitudes and expectations toward the organization for which she was working as a consultant. Particularly, we were struck by the ways in which the ethnographic work was rendered visible or invisible as ethnographers positioned themselves either as a company's representative or as a researcher. In the end, the

work was deemed interesting to the extent that it represented a possibility of business relationships.

ETHNOGRAPHIC WORK "IN THE SPOTLIGHT"

In early 2007, I (Rogério) received a call from Intel's local marketing team asking whether I would be interested in "conducting some ethnographic work" at the Campus Party. At first, I found it totally "unacceptable" as a legitimate research endeavor in that clearly the local team had no interest in attaining any deeper understanding of that event, its user population, and their practices. Also, there was not a clear and direct research or business implication for my group. However, in a rather peculiarly anthropological way, this request seemed attractive. A month later, after many emails back and forth discussing the "strategy" of the research work, scheduling media interviews during the event, as well as rehearsing the "message," I packed up for a week of "fieldwork."

Of course, the event offered a unique opportunity to observe, interact with, and understand a (hard)core PC user group, but more interesting were the encounters (or lack of) of the various 'tribes' participating in the event – gamers, modders (computer chassis personalizers), bloggers, open source community members (or 'open source advocates'), and the like. What was particularly puzzling and unique was that although these people represented the most active members of online communities, they were still willing to pack their computers (not notebooks, but their actual desktops including CRT monitors) and sleeping bags in their backpacks, travel from different parts of the country (as well as from other countries in Latin America), and spend a week camping together. This in fact became the standard answer for why Intel had sent an ethnographer to study the event. The press, however, was more interested in the fact that some companies were using the event for recruiting programmers, bloggers, and other professionals. As they reported, people in the event for the most part were interested in knowing others like them, whereas companies were more interested in these people as professionals.

In this game of interests–researchers interested in people, people interested in other people (or job opportunities, for that matter), reporters interested in companies, and companies interested in professionals (as well as reports – do you mean 'reporters' or 'reports?')–identities were being constructed through people's encounters (ethnographic, business, and casual interactions for example) while at the same time people continued to perform their own identities as gamers, modders, bloggers and open-source people. Identity negotiations were clearly the case here. For instance, at times I performed my ethnographic work – taking notes and pictures of observations and conversations. At one time, though, I was explicitly asked to 'perform' ethnographic work as part of a TV news report. In doing so, different identities got conflated in the same performative action, namely, I was at once publicly performing a stereotypical notion of ethnographic work (the reporter asked, "please go ahead, do your job as you normally do it, watching people, and please pretend we are not here;" and I cracked a smile) while simultaneously being an Intel representative – talking to

the reporter as an Intel trained spokesperson. Different interests were at play—the firm's interest in getting media coverage (a quantifiable ROI – in fact, my work was recognized for its primetime coverage), the reporter's interest in finding a unique, interesting story while covering the event, and my somewhat peculiar interest in letting the 'show' run, stepping out and analyzing the whole situation.
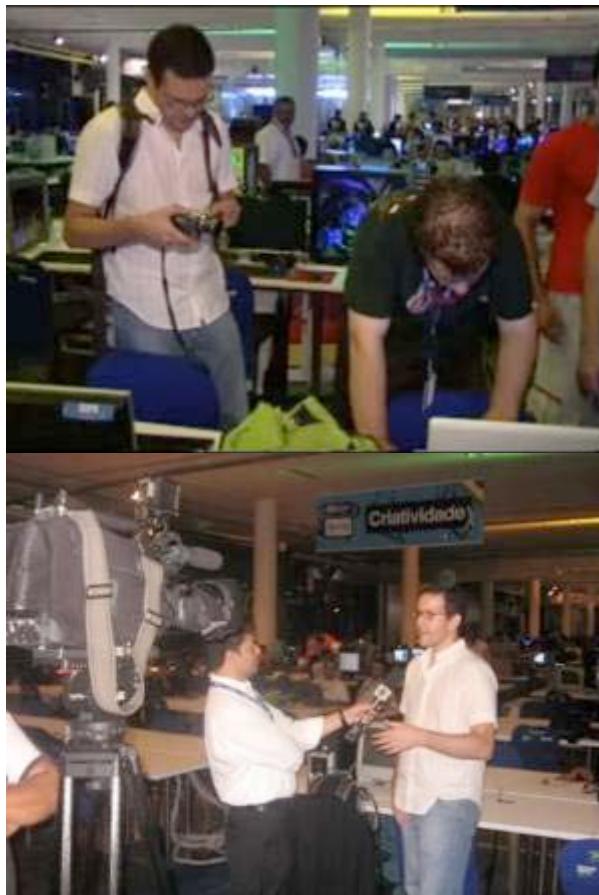
FIGURE 1: Ethnography as performed in front of the cameras and a local journalist interviews Rogério (Intel's ethnographer)

The interaction between the ethnographer and the journalist becomes problematic when the 'field' is a site of business and marketing negotiations and enactments. As Marcus states, in the opening quotation, ethnographers function (and often are taken as) "the best and deepest journalists," particularly when we think of the ways in which their work

When Intel hired Levi-Strauss

(epistemologically and methodologically speaking) is taken as a matter of collecting real data from real people – a positivist instance of doing qualitative research in an objective distance. But, this is what people expect nowadays of the ethnographic work as ethnography becomes a 'brand.' As such, this is how the work (and its outcomes) is actualized and takes shape in people's imaginaries, inside and outside the organizations.

In the following excerpt from the transcript of one of the interviews, we can detect two positionalities. On the one hand, the reporter describes the ethnographer as a professional who studies behaviors, trends, and cultures to influence business and product development. Permeated in the language of behaviors and trends is the inherent notion that such study helps to unveil people's psychological motivations. In fact, as Sunderland and Denny (2007) stated, psychology provides the intellectual "fodder and framework through which consumption is thought to be generated as well as best explained" (p.46). Thus, ethnography is positioned as a market as well as marketing strategy for understanding and best predicting people's (future) behaviors. On the other hand, I tried to position my work as a matter of understanding the motivations behind people's practices (and behaviors) and ultimately what and how meanings are endowed to them – why are people doing what they do? What are the explanations behind their various manifest behaviors? What are their logics? As opposed to the notion of culture as particular categories – e.g., gamers, modders, and bloggers – the very notion of culture is in question – how do these practices – gaming, 'modding,' blogging – constitute 'cultures?' In other words, how are these practices helping define and reify these people's identities as gamers, modders, bloggers, or what not?

> "The taste [as likings] of internet users is of the industry's interest. Intel sent to the event an 'ethnographer' – a professional who researches behaviors, trends, and studies the culture of groups so as to anticipate desires [wants] that can become products. 'I came here to understand why this group of people is here, why these people who often communicate through the internet feel the need for a personal encounter,' explains Rogério de Paula, an ethnographer from Intel. [2]"

In the end, from the firm's perspective, the 'research' was successful as the press found it "interesting," generating thereby a handful of "free PR" opportunities. On the other hand, my ethnographic work and analyses generated a number of insights concerning gaming and 'modding' practices that could be valuable to the business world. For instance, it was observed that people chose to travel long distances to participate in the forum in order to strengthen their position within their particular communities. Also, the ways in which people 'performed' what it meant to be a gamer, a blogger, a modder differed by means of the uniqueness of their PC chasses and the stories around the stickers on their laptops, as well as by different hacking, sharing, and subverting practices. However, such insights were never of

---

[2] Translated by the authors: "O gosto dos internautas interessa à indústria. A Intel mandou para o evento um 'etnógrafo', um profissional que pesquisa comportamentos, tendências e estuda a cultura de grupos para antecipar desejos que podem virar produtos."*Eu vim pra cá pra entender porque esse grupo está aqui, porque que essas pessoas que se comunicam hoje pela internet tem a necessidade de se encontrar pessoalmente*", explica Rogério de Paula, etnógrafo da Intel."

interest to Intel, given that from start the work was never meant to 'understand' people and their practices.

"OH, A RESEARCHER <sigh>… NICE TO MEET YOU THEN…"

In this section, I (Vanessa) describe my experience working as a researcher consultant for Intel in a project taking place in Parintins, Amazonas state - Brazil. The goal of this research project was to evaluate the impact of the Wimax technology which allowed three public schools and one health clinic to have access to high speed internet. The Wimax project was part of a larger Intel initiative called World Ahead, which aims to invest more than one billion dollars all over the world in order to improve and increase computer and internet access to communities in developing countries[3]. In this context, my responsibility was to work with a researcher (Kathy Kitner) from Intel Research, collecting, data, setting up and conducting interviews, as well as translating the information from Portuguese to English.

We spent 10 days in Parintins and during this period we were exposed to different groups which identified us as representatives of a multinational corporation in the position of changing and improving the community's lives. In the interviewees' minds, we were there to analyze the situation, listen to the complaints, suggestions and requests, then take this information back to Intel, and consequently solve the community's problems concerning infrastructure, access, and needs. When I realized that people had such expectations, I tried to explain that we were 'only' researchers and that we did not have enough power to change the situation since we were there just to collect data and generate a report about the impact of such a project in Parintins' context. As such, their disappointment was conspicuous when they found out that we were "just" researchers, those "who come, take our time and we never see them again." Even so, people took the time to talk to us and to show us around the places where we had planned to go.

However, in the case of the local and regional businesses, the reaction was not as friendly. After meeting the city mayor, he invited us to a dance performance that night. Around 11:00 PM he sent his driver to our hotel and we headed to his house. There we met his wife and three other couples. We all headed to the event together where we stayed in an area reserved for 'authorities' (a.k.a., VIP). At this place we were addressed by a man who said: "*I was looking forward to meeting you. When are you going to open the access to Wimax technology to the local business? I really need to have access to high speed internet.*" This person was different from the average Parintins citizen. He was fluent in English, and belonged to a Jewish-Franco-Moroccan family that migrated to the region in the 1930s. His family worked on the commercialization of forestry products all over the world, but after the Brazilian legislation

---

[3] World Ahead program is supported by 4 pillars: 1. Accessibility: Providing the foundation for technology usage and ownership, 2.Connectivity: Extending broadband Internet access to developing countries 3. Education: Preparing students for success in the global economy through programs, resources, and technology, and 4. Content: promoting locally relevant content and services that expand opportunities.

became more rigorous in the 1980s and ideas pertaining to the importance of the Amazonia's preservation became part of the ecological discourse of environmental preservation, his family changed their business niche and became the owner of one of the larger slaughterhouses in the region[4]. After he spent some years living in different parts of the world as a Brazilian diplomat, he decided to assume control of his family's business and he was looking for Internet connection so that he could improve his business efficiency. This man represented the elite of Parintins' business sector and he was at that event because the mayor told him that Vanessa and Kathy (to note, from Intel) would be there. In his mind, we represented Intel and were the means by which he would reach Intel and show his interest in Wimax technology.

At that point, I was utterly surprised, for as an academic researcher I had never previously been identified as part of a multinational corporation. As such, my identity was being constructed based on my professional affiliation with a corporation whose goal is to do business, exploring new consumer markets. After listening to what the man had to say, I explained that we were from Intel's research department and were evaluating the impact of Intel's project in Parintins. He was noticeably disappointed. In his mind, researchers have limited influencing power over decision making at the business levels, and thereby were not the best suited to take his business interest to Intel. After this encounter, he politely talked to us for a while, about the region and his experiences in the US, but he did not leave his contact information with us, nor did he ask for ours—a common practice when one meets potential 'business' partners. Sometime later he left the event and waved goodbye from distance. The following day, we realized that he was staying in the same hotel as us. We had the chance to talk more with him, but he kept a distance. Once he realized we did not represent Intel's 'business' sector, we were not worth any attention.

As a researcher and ethnographer associated with Intel, I experienced how such affiliation impacted the ways in which those researched attributed different identities to us. At the first moment, they saw us as representatives of Intel, an American company that locally represents wealth, modernity, technology and the opportunity to access new technologies that would insert the population of Parintins into the globalized world. At the same time, the local people assumed that since we occupied a position of power and privilege, we would be able to help them solve their problems, in this case access to high speed internet. Because we for the most part work for the private sector, as Intel employees or representatives, they assumed that we had power to influence decisions at a company level. But, once we were identified or identified ourselves as mere researchers, they changed how they saw us: from a channel or instrument to help them with their needs, to powerless observers whose work was simply to observe, analyze and report our findings to those who actually make decisions. At this point, as a researcher, I did not represent change and improvement, but rather stagnation and lack of change.

---

[4] Nowadays, Parintins' economy is based on cattle production and tourism.

FIGURE 2: (left) and Vanessa (middle) helping give the prizes. Parintins' mayor stands in the back. Both clearly stood out as 'foreigners'

When Intel hired Lévi-Strauss

On June 1st, 2007, Época (a popular Brazilian magazine) published an article entitled "Call Lévi-Strauss![5]" In this article about the use of ethnography in the industry, the reporter asserted that more and more companies were hiring social scientists to help them create new products, business opportunities, and the like for the emerging market. But, he began by describing the "everyday work" of an ethnographer: namely, visiting native tribes in Tocantins (middle of Brazil), walking in a public market in Mexico City, and asking for the blessings of a "mãe-de-santo" (Candomblé priestess) in Salvador. In doing so, the magazine defined the path for ethnographers in Brazil. In this narrative, ethnography interestingly is positioned along the same lines as the work of classic anthropologists, such as Lévi-Strauss. Notably, in the same ways that Margaret Mead brought cultural anthropology to a wider public in the US [as Sunderland and Denny (2007) discuss], Lévi-Strauss became the reference for what it means to conduct ethnography in Brazil. The images of an outsider (white, male researcher) living with the natives, observing their everyday practices, writing down notes, recording interviews, and the like, come back time and again.

---

[5] Translated by the authors: "Chame o Lévi-Strauss"

However, the ethnographic encounters discussed in this article go beyond a positivist notion of an objective outsider observing the 'natives,' understanding their needs, and reporting on these findings. Instead, ethnographers talk about the complex knotted relationships of power, interests, people, and practices that shape who researchers are in the field, what they choose to render visible (or not), and the impact it might have on the organization as well as on people's lives. As we saw, the (research) work is by and large about having an impact on the business and people's lives, while managing all the entanglements of doing fieldwork. Even in academic work this is the case. Elsewhere, Empinotti (2007) discusses her positionality relative to one of her interviewees, a small farmer, when he trenchantly asked her to take his interview public after she had assured that all participants' identities would be kept private: "Oh no! I want everybody to hear what I just said. I want to hear it on the radio and make sure that the state officers hear what we have to say" (p.92). To have an impact should thus be one of the key considerations when we carry out the research we do as ethnographers—to tell stories that reflect a deep sensibility to the various interests that come to play in doing fieldwork in the industry, among them, the politics of visibility.

In the end, does the industry need "Lévi-Strauss" or "Aiwa Ong"? As Genevieve Bell put it (personal communication), Intel 'needs' Lévi-Strauss (and in fact thinks it has hired a number of them) as it has difficulties dealing with post-structuralist, feminist researchers. We do not attempt to argue, however, that we, as researchers, should take any particular position (let alone, to adopt a more traditional, positivist position). Rather, we should be flexible (and reflexive) and able to adapt the work to meet the various needs, perspectives, and values – to frame the work in a somewhat post-structuralist, feminist way. In other words, we have to attain a great deal of understanding of the ways that organizations operate so that we are able to create appropriate (cultural) translations of our ethnographic encounters and thereby have an impact at a business level as well as on people's lives. However, it is required from us to effectively communicate with different businesses across the organizations – where more structured discussions play critical role. We, as researchers, bear the burden of untangling and sorting out the entanglements of fieldwork, turning that visible, while making the translations relevant to both people and businesses. Thus, the industry will continue hiring "Aiwa Ong" as Lévi-Strauss, and we, on the other hand, should be aware that we will be carrying with us to the field not just our "Moleskine®," digital camera, video recorder, and other equipment, but also our business cards.

FINAL REMARKS

Ethnography is a "messy business," a perceived 'messiness' that in part emerges from the fact that people have no access to and understanding of its implications. However popular it has become in recent years, it continues to be misconstrued by our colleagues outside the few ethnographic research pockets across large organizations, such as Intel. Often taken as exoteric divination of sorts (we have lost track of the number of times we were asked whether we could tell them -colleagues, the press, or whoever –the "new

trends"), ethnography still puzzles people as to the kinds of research practices it employs, data it collects, results it offers, and values it brings to an organization.

We are thus invited to consider the ways we, researchers, render our work visible. That is, we must question how our own positionality and rhetoric affect the ways in which people (be they the firm and/or customers we work for, those researched, or the press) understand ethnography, which in turn shape our research practices. For a number of reasons we have been complicit in producing simplistic, stereotypical (á la butterfly collecting) discourses, as Nafus and Anderson (2006) assert: namely, defending the 'value' of ethnographic research in unveiling the real problems/needs of real people, identifying trends and observing behaviors. This is not to say or argue that ethnography cannot contribute to such understandings, but that we are against the idea that there is a crystal ball that answers all business questions. Ethnography is not the Holy Grail, but a critical, complex methodology that offers interesting, nuanced, and often inspiring stories about people and their everyday mundane lives – often invisible from office windows.

REFERENCES

Baba, Marietta
2005   *To* the End of Theory-Practice 'Apartheid': Encountering the World. *Ethnographic Praxis in Industry Conference Proceedings*, 175-186. Washington, DC: American Anthropological Association.

Clifford, James and George E. Marcus, editors
1986   *Writing Culture: The Poetics and Politics of Ethnography*. Berkeley: University of California Press.

Crag, M.
2005   Qualitative Methods: there is nothing outside the text? *Progress in Human Geography* 29(2): 225-233.

Empinotti, Vanessa
2007   *Re-Framing Participation: The Political Ecology of Water Management in the Lower São Francisco River Basin – Brazil.* Unpublished Doctoral Dissertation. University of Colorado, Boulder.

England, K.
1994   Getting Personal: Reflixivity, Positionality, and Feminist Research. *Professional Geographer* 46(1): 80-89.

Goldstein, Donna
2003   *Laughter Out of Place: Race, Class, Violence, and Sexuality in a Rio Shantytown.* Berkeley: University of California Press.

Halstead, Narmala
2001   Ethnographic encounters. Positionings within and outside the insider frame.
              Social Anthropology 9 (3): 307–321

Hastrup, K.
1992   Writing Ethnography: State of the Art. In J. Okely and H. Callaway (editors)
              Anthropology and Autobiography. London: Routledge.

Landes, Ruth
1994   *The City of Women*. 2nd Edition: :Albuquerque: University of New Mexico
              Press.

Nafus, Dawn and Anderson, Ken
2006   The Real Problem: Rhetorics of Knowing in Corporate Ethnographic
              Research. *Ethnographic Praxis in Industry Conference Proceedings*. Washington, DC:
              American Anthropological Association.

Sunderland, Patricia L. and Denny, Rita M.
2007   *Doing Anthropology in Consumer Research*. Walnut Creek, CA: Left Coast Press,
              Inc.

Wolf, Diane L.
1997   *Feminist Dilemmas in Fieldwork*. Boulder, Westview Press.

Closing Keynote Address - Reassembling the visual

LUCY KIMBELL
Said Business School, University of Oxford

In her presentation to EPIC, Kimbell reflects on how data are visualized and how they are experienced. Drawing on work in the visual arts and design, she considers what practices that seem to be gathering and visualising data are actually doing, from installations such as her project 'Physical Bar Charts' (2005-8) to methods such as cultural probes. These examples are combined with ideas from Science and Technology Studies (STS), which foregrounds the empirical and the mundane, and questions how accounts of the social are constructed. Writers in this tradition have emphasized the ways that public experiments are used to assemble data and paid attention how data are visualized. The discussion includes work from a recent public experiment in which Kimbell was involved, as organiser of an exhibition of work by artists and designers as part of an academic workshop in Oxford entitled 'Imagining Business'. Together, these different ways of thinking about visualising and experiencing data raise questions for ethnographers and designers working in organisations where their role includes assembling data into accounts for others.

I'd like to start with a simple thought experiment. If I name some artists and designers, what comes to mind when you hear their names? Try it now. I'll pick well-known names so that there is a strong likelihood you will have seen some of the work. Picasso, Mies van der Rohe, Charles and Ray Eames, Andy Warhol. It's likely that it's an *image* of their work. Now, let's consider some of the authoritative accounts from ethnography. What comes to mind as you hear these names? Malinowski, Levi-Strauss, Clifford Geertz, Mary Douglas. Is it a page of text that you have in mind? Most likely not. If I now ask you to pay attention to something visual that you associate with their work, perhaps it's a diagram that comes to mind. But it's more likely to be an image you associate with their work, perhaps a photograph he or she took, or perhaps a photo of the researcher.

We expect art to be visual and/or performative. And we expect designers, especially those educated at art school, to create visual artefacts as a key part of their practice. But typically, we still expect to *read* the work of ethnographers. Visual anthropology has done much to challenge this. It has brought to attention the visual features of cultures being studied. And it has developed visual methods, such as photography, film and video that can be used to record and disseminate knowledge (Banks and Morphy 1997; Pink 2007). The photographs and videos at this conference are evidence of the impact of these visual practices. But words are still dominant in ethnography.

In what follows, I will propose that ethnography should attend to practices in contemporary art and design – but not because they are visual. Some artists and some designers are gathering data, in fact, they are creating data. They analyze this data and they generate theories. This matters to ethnography, not because these are visual methods, or because the data are often visual data. What matters for ethnography is that what these artists are doing is creating accounts of human experience. They are creating topologies which show how what we call objects cannot be separated from what we call the social. They create experiences in which the visual is important, yes, but what is more important is the assembling of humans and objects in novel ways to say something about the human condition.

As I develop my argument I will draw on two important ideas within Science and Technology Studies/Actor-Network Theory (STS/ANT). The first concerns the roles of objects in constituting social relations, and the second the ways that social scientists create accounts.

Latour and Woolgar (1986) and others have controversially foregrounded the roles of objects, which they see as taking part in the ways that knowledge is created, facts are established, and controversies are stabilized. We might say that STS has noticed the objects that are involved in producing scientific knowledge, but without seeing them. Follow the actors, say Latour and colleagues, and many have diligently gone off to watch what objects are doing. They have followed them, but have they *looked* at them? Have they paid attention the way an artist or designer would, to the use of this material, rather than that one, to this font rather than that one, or this colour rather than that one? And if they have seen objects assembling the social, as Latour (2005) describes it– why do we have to rely on reading about what the objects have done, rather than seeing it?

Having paid attention to the role of objects in constituting social relations, in recent years, these scholars have acknowledged the messiness and contingency in their accounts. John Law (2004) has drawn attention to the performativity of social science's research methods, and emphasized their limitations in creating accounts of the messy realities in which we are implicated. Bruno Latour has organized two exhibitions, both in collaboration with artist and curator Peter Weibel, in which he has sought to assemble through material means an argument about the role of artefacts in constituting associations (Latour and Weibel 2005). More recently Nigel Thrift (2008) has developed a 'non-representational theory', which emphasizes the practicing of performative and embodied knowledges. These can be seen as attempts to shift the social sciences towards paying attention to objects and bodies and what they do, away from an emphasis in their accounts on representation, towards the importance of practice.

My question today is, what would it mean for the social sciences to pay attention to artists who are already doing this? In answering this question I will offer examples of three different works, which to me can be read both as works of art or design, but also as the sorts

of accounts of socio-materialities which offer ways to address the challenges posed by Law, Latour and Thrift.

Some artists, some designers, in the ways they go about making their work, are a kind of scholar in this tradition of Actor-Network-Theory. Going further than Michel Callon's (1987), argument that engineers should be thought of as engineer-sociologists, I am proposing that these artists and designers are ANT-practitioner-theorists. Their works can be seen as topological assemblages of objects and humans, or as actor-networks, or as accounts of actor-networks.

The first of my three examples is a project by Anna Best called *PHIL* (Best accessed 2008). Anna was invited to work in particular part of London in which there was a discussion then taking place about the role of the arts in economic regeneration and the engagement of audiences with art in the public realm. First, she went through the electoral register and found people who had the letters *phil* in their name – Phillip Scott, Philippa Bessant, Louise Philpot and so on. She got in touch by putting flyers through their doors and ringing on doorbells and 15 people agreed to take part. Then she asked 15 musicians from the London Philharmonic Orchestra to go to the homes of these 15 people and play their part of the score from Mozart's Eine Kleine Nacht Musik. One musician went to each home. Here are some of the photographs that documented these encounters. This was a solo performance for a tiny audience, often one person, in which the musician kept time to a video of the conductor. This pairing of the orchestra member playing their part, in the home of someone with *phil* in their name was repeated 15 times. Anna Best recorded each of these 15 encounters on video in close up and in a wide shot. The resulting 30 videos were then assembled in a darkened gallery space and members of that audience were asked to press the play buttons to start the videos playing. I'm now going to play you some of the video that documents that performance.

The second example is by Chris Evans, an ongoing project called *Radical Loyalty* (Evans accessed 2008). Like Anna Best's *PHIL*, this project involves ideas about what constitutes the local and the relations between audiences and artworks. Also like Anna Best's project, *Radical Loyalty* is hard to describe in a few sentences or by showing you an image, because it is not easily reducible to a determinate art object or event. Chris Evans will design a sculpture park in the industrial town of Järvakandi in Estonia. The forms of the sculptures are determined by a number of interviews he conducted with senior executives from companies such as Daimler Chrysler Finance and Starbucks. In these interviews he asked them to describe what they understood "radical loyalty" to mean. Chris uses the word "consultant" to describe his role in those interviews, in which he was helping give form to the interviewees' ideas. What resulted were sketches and maquettes for the sculptures, some of which have been already been shown in galleries. But the project is yet to be completed, because these sculptures will be constructed by Estonian artists that Chris has hired. Under communism, their job was to create public monuments. Now Chris Evans, a British artist, has asked them to produce sculptures that visualize the ideas of senior executives about radical loyalty, to be shown in a public sculpture park in a former communist state.

The third example is my own project *Personal Political Indices*, or *Pindices*, a collaboration with sociologist Andrew Barry (Barry and Kimbell 2005). A version of this, called *Physical Bar Charts*, has been part of this conference, the tubes on display in the foyer and the button badges some of you have helped yourselves to and worn. This work is concerned with the visual assembling of data and its disassembly, as the objects of the data-gathering – the badges – are taken away, put in pockets and bags, or worn. The badges become actors since they spark conversations between people, producing, temporarily, a network. In the version at this conference, there has been a question about how visible you have been this year to prompt you to take badges as a way of answering the question. There was also space for participants to forecast the levels of the tubes by the end of the event, and an invitation for you to give your reasons for these forecasts. Some of you have worn badges, some have not. Like the other two examples I have shown, it is not clear where the work is located. The tubes and the badges are very visible objects, and yet the success of the piece lies in the badges being taken away. The record of the taking of the badges produces the *Physical Bar Charts*, a visual account that shows, inversely, which badges are most popular. Data are created at the same time as the results of the data are assembled. And yet an important part of the piece is not documented – the traces that the badges leave in conversations here, or when you get home, or when you find a badge that pricks your finger when you put your hand into your pocket a month or two from now.

These three works, I propose, are visual reassemblies that create social arrangements. In each, the artist creates some data and, at the same time, creates a form for engaging with the data and with theories of the social that are implicated. These projects arrange people and objects into sets of relations. They collapse the global and expand the local and hold this in tension. My title here today – Reassembling the Visual – emphasizes the visual but Latour's (2005) book title *Reassembling the Social* could also describe what these practitioners do. They call themselves artists or designers, but this is not what is important. They work with visual methods and visual data but this is also not what's critical. What's important is that their practice involves crafting arrangements of humans and objects into accounts of human experience.

But to return to my question about what would happen if the social sciences were more attentive to these practices? One way of doing this is to think about the ways in which ethnography as a discipline engages with design as a discipline. In considering this, I will draw on empirical research into interdisciplinarity conducted by Andrew Barry, Georgina Born and Gisa Weszkalnys (2008). They propose three modes of interdisciplinarity – the ways that disciplines engage with each other. In my appropriation of these modes I will be paying special attention to what the practices of design might mean for ethnography.

The first mode in which ethnography and design engage is the *service* mode. Ethnography uses design to style the tools of ethnographic research. Communication design skills, for example, can help with the arrangement of text, photographs and diagrams, or the editing of video footage. This is design as styling, helping deliver the messages of

ethnographic research. Viewed the other way round, we can think of ways that design makes use of ethnography in presenting its arguments, lifting from ethnographic research its data or its analysis. This mode is design craft in the service of ethnographic research or ethnographic data in the service of design process.

The second mode is *integrative* and *synthetic.* Here ethnography works closely in partnership with design to develop artefacts which might persuade stakeholders. Design methods and processes are deployed to help critique existing arrangements or imagine proposals for new ones, stimulated and complemented by ethnographic research. Examples here are prototypes or mockups of product or service ideas, or narrative devices such as scenarios. Design here is much more than styling; it is essential to the imaginative possibilities of research, not just making it more visible and digestible but synthesizing it in the creation of visual artefacts that suggest new ways of doing things, new products and new services.

The third mode is one in which design and ethnography lose their disciplinary identities, not to merge into to some happy communion but rather an unhappy one. In this mode, what happens is a reassembling of the visual, creating accounts within which audiences and stakeholders find themselves entangled. This mode is *agonistic-antagonistic*, meaning the disciplines are in continual argument. Paraphrasing Barry et al, here design is in a self-conscious dialogue with, criticism of, or opposition to, the intellectual, ethical or political limits of ethnography, and vice versa. Working in this way involves a kind of invention; the creative clash between design and ethnography generates knowledge in the form of methods and forms that may not make sense to either discipline. I am not well-placed to comment on whether anthropology can or does operate in this mode. But through the examples I have given of works by artists and designers which reassemble the social through reassembling the visual, I make a claim that some kinds of design is well-placed to do so.

To summarise, I have borrowed Barry et al's three modes of interdisciplinarity to think about the ways that ethnography might engage with design: the service mode, the integrative-synthetic mode and the agonistic-antagonistic mode. The three projects of visual reassembly I described earlier are, to my reading, examples of the third mode. They are works produced in the context of art and design but blur beautifully with other areas of practice, regeneration, business and social science. I could have chosen to give you an example to illustrate each mode, but you are already familiar with modes one and two – they are the core practices of design and ethnography in organizations. The third mode, however, is tricky, destabilizing, critical, hyper-reflexive, contingent, resistant– all virtues that are cherished in art and design and in ethnography. The third mode reassembles the social and material possibilities of disciplines.

To bring this conversation back to this community, what might be the implications of reassembling the visual, of operating in the agonistic-antagonistic mode?

I will try to answer this by considering one kind of device that has been discussed within this group of designers and ethnographers (Loi 2007). The cultural probe is a device that many of you will be familiar with. Originally conceived of by Bill Gaver and his then colleagues at the Royal College of Art in London, the cultural probe has now become something around which a controversy has emerged. In their original paper (1999), Gaver et al described the cultural probe as a design method to help with inspiration, to enable the authors create a way of thinking about a new research area. In a more recent paper, Gaver and others (2004) have commented on the way that their original idea has been adopted and adapted by other researchers, in ways which disrupt their original intention to hold a place for uncertainty. The probe is now part of the toolkit of some designers, used not just for inspiration but also for data-gathering and to open up conversations with stakeholders (Loi 2007).

Here we have two kinds of cultural probe: one conceived of as a design research method to stimulate inspiration and hold a place for uncertainty; and another, a method used to gather data to reduce uncertainty about users. How can we make sense of this? If we view the cultural probe pack through the lens I have just described, it is not mode one: design used to style a data gathering method. Nor can we see it as an example of mode two: design integrating with ethnography to create a new method.

In my reading of cultural probes, they are an example of mode three. The cultural probe as a method is an agonistic-antagonistic intervention into discussions about what constitutes data and data gathering by doing a strange kind of enquiry. The probe is a kind of rhetorical form since it has to capture the imagination and engagement of the people it is given to, but the hope is that the probe brings back something that still leaves room for uncertainty. Researchers designing and using probes packs are reassembling the social paying, particular attention to visual data. They are involved in constituting messy realities in which they, the stakeholders and the objects in the packs are all entangled. Cultural probes, playful triggers (Loi 2004) and the other novel forms emerging from design and art are ways of reassembling the social through paying attention to the visual. As such they offer an intriguing way for this community to reconceive of the boundaries between its disciplines.

To conclude, I'd like to imagine what might happen if ethnography *did* begin to engage with the reassembling of the visual I have outlined today. What sorts of activities might we see? Within organizations commissioning research, there would be projects in which visual reassemblies would serve to show how data are created. These accounts would challenge the existing polarities between quantitative and qualitative, between data gathering and data analysis, between ethnographic research and design research. Like Anna Best's *PHIL*, these would be public experiments which would offer accounts of human experience.

At conferences there would be possibilities to do and to engage with visual reassembly, not just as workshops, or poster sessions, but as a kind of paper, as an argument. These would not be decorative add-ons, but integral to the event. The artefact and scenarios sessions at this conference are examples of how this might work. But imagine going even

further and being involved in reassembling the visual for and with this public, and other publics, in the ways that Anna Best or Chris Evans have done.

An example I can offer is an exhibition *Imagining Business* I organized earlier this year at Saïd Business School with sociologist Nina Wakeford and curator Alex Hodby (Hodby et al 2008). This came about in dialogue with my colleague Paolo Quattrone, who organized an academic workshop entitled *Imagining Business: Reflecting the Visual Power of Management, Organizing and Governing Practices*. I proposed that if we were to hold a workshop at which academics gave papers and showed Powerpoint slides about visualization in organizations, we should have artefacts there as their own arguments. The images I show here are of the seven works from the exhibition that became part of the workshop. As well as Chris Evans' *Radical Loyalty* which I described earlier, and my *Physical Bar Charts*, there were contributions by Carey Young, Nina Wakeford and consultancies live|work and Wolff Olins. The exhibition was distributed in spaces within the business school, and was open for three weeks before the workshop.

Carey Young's piece *Everything You've Heard is Wrong* (1999) is a video from a talk she did at Speaker's Corner in Hyde Park in London, a site associated with free speech. Here she gave passers-by advice about giving presentations while competing for attention with the usual collection of political and religious speakers around her. Nina Wakeford's pieces included *Here Comes Experience!,* an audio work in English and Mandarin in which designers described experience models they use. Her piece *Trials of Strength* (2007) consists of bright blue balloons filled with helium, from each of which dangles a mercury themometer with no markings on it. This piece was located in one of the lecture theatres used in the workshop. The service design and innovation consultancy live|work showed how they reassembled a client's data by making the sorts of artefacts they produce in their day-to-day practice. And finally branding consultancy Wolff Olins created an installation proposing the idea of 'new' as a way of stimulating innovation.

Imagining Business made space for visual assemblages created by different kinds of practitioner as part of an academic workshop. As organizers, it was important for us that participants had an opportunity to engage with these works, and the exhibition as a whole. We organized a guided walk-through in which some of the artists and designers talked about their work, with academic Noortje Marres taking the role of discussant. Was the exhibition successful? When one senior ethnomethodologist told me he thought the *Physical Bar Charts* were not much more than a questionnaire, I realized how difficult it might be to get ethnographers – even the ones who really pay attention to things – to *look* at exhibitions when they are used to *listening* to papers.

Before I finish, I will summarise what I have tried to do. I have argued that the social sciences, that ethnography, should pay attention to practices in contemporary art and design that are involved in reassembling the social. These practices make use of visual methods and create visual data, but this visuality is not the important part of my argument. What is important in the projects I've described, is how Anna Best and Chris Evans, for example,

arrange people and objects into sets of relations, into actor-networks. Data are gathered, data are represented, and theories of the social are entangled with the experience of the form of the work. These are important accounts of the human condition. And they seem to be operating in the third mode of interdisciplinarity I described – the agonistic-antagonistic mode, which questions what disciplines do. As such, they present an opportunity for ethnography, especially for ethnography within multidisciplinary projects in organizations.

A few months ago I went to Highgate cemetery in north London, close to where I live, to pay my respects at the grave of Karl Marx who is buried there. At the bottom of his large tombstone is engraved the famous quote: "The philosophers have only interpreted the world in various ways. The point, however, is to change it." I will end with my own provocation which I hope to have an opportunity to discuss with you further: Ethnography has only described and analysed the world in various ways; the point, however, is to reassemble it![1]

ACKNOWLEDGMENTS
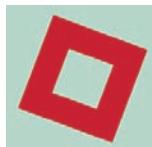
REFERENCES CITED

Banks, M. and Morphy, H.
1997   *Rethinking Visual Anthropology*, New Haven: Yale University Press.

Barry, A., Born, G. and Weszkalnys, G.
2008   "Logics of interdisciplinarity", *Economy and Society*, 37(1): 20-49.

Barry, A. and Kimbell, L.
2005   "Pindices" in Latour, B and Weibel, P (eds) *Making Things Public: Atmospheres of Democracy*, Cambridge: MIT Press.

Best, A.
2008   http://www.annabest.info/phil/index.html, accessed August 28, 2008.

Callon, M.
1987   "Society in the Making: the Study of Technology as a Tool for Sociological Analysis". In W. E. Bijker, T. P. Hughes and T. J. Pinch (Eds.) *The Social Construction of Technical Systems: New Directions in the Sociology and History of Technology*. Cambridge, Mass. and London, MIT Press: 83-10.

Evans, C.

---

[1] My thanks for Andrew Barry for this suggestion.

2008   http://www.chrisevans.info/art/radicalloyalty/radical_loyalty_right.html, accessed
          August 28, 2008.

Gaver , W. and Tony Dunne , Elena Pacenti
1999   "Design: Cultural probes", *Interactions*, 6(1):21-29, Jan/Feb.

Gaver, W., and Andrew Boucher , Sarah Pennington , Brendan Walker
2004   "Cultural probes and the value of uncertainty", *Interactions*, 11(5) September +
          October 2004.

Hodby, A., Kimbell, L. and Wakeford, N. (2008) *Imagining Business*, exhibition catalogue,
          Platform Projects.

Latour, B. and Woolgar, S.
1986   *Laboratory Life: The Construction of Scientific Facts*, Princeton, NJ: Princeton University
          Press.

Loi, D.
2004   "A suitcase as a PhD? Exploring the potential of travelling containers to articulate
          the multiple facets of a research thesis." Working Papers in Art and Design 3,
          Retrieved October 28, 2008 from URL http://www.herts.ac.uk/artdes/
          research/papers/wpades/vol3/dlfull.html ISSN 1466-4917

Loi, D.
2007   "Reflective probes, primitive probes and playful triggers" *Ethnographic Praxis in
          Industry Conference*, Keystone, CO. Washington, DC: American Anthropological
          Association.

Latour, B.
2005   *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford University
          Press.

Latour, B. and Weibel, P. (eds)
2005   *Making Things Public: Atmospheres of Democracy*, Cambridge: MIT Press.

Law, J.
2004   *After Method: Mess in Social Science Research*, London: Routledge.

Pink, S.
2007   *Doing Visual Anthropology*, Sage

Thrift, N.
2008   *Non-Representational Theory: Space, Politics, Affect*, London: Routledge.

1. Cut It Out in Cardboard

JACOB BUUR
LARISA SITORUS
University of Southern Denmark
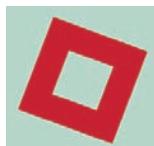
Ethnographic text does not sit well with designers and development engineers. Even in the truncated form of bullet-point insights, text hardly works to encourage innovation. At EPIC 2007, we introduced the Danish proverb 'Cut it out in cardboard' to encourage a discussion of ethnographic insights as visible and tangible material. We claimed that rather than convey 'findings' in a rational argument, design ethnographers can provoke engineers to reframe their perception of technology by the choice of ethnographic material they produce. We will bring our own examples such as video card games, interactive sculptures, and site plan models. The aim of the workshop is to establish a collection of examples of 'ethnographic design material', to explore how it works, and to set an agenda for future research. We will mutually inspire each other to focus on the crafting of such material and on how to organize enticing activities around it.

In this workshop, the facilitators bring forth the issue of 'ethnographic design material' and briefly provide an overview of their own work. The participants will have the chance to demonstrate their examples to highlight the variety of cases and materials. With a video shot from each demonstration, we will use a 'video action wall' technique to collectively build a framework of ethnographic material. We will engage participants in discussing the following:

a) Why does tangible material work differently from text?

b) How do they communicate insights and/or maintain ambiguity?

c) Why does transfer of ownership through the material seem to be crucial?

d) What role does fun play?

We will discuss challenges, directions and possible collaborative engagements that this methods field may explore through research and experiments in the future.

2. Making Community Worldviews Visible through Photo Novella

GRACE ZAMORA-ROLDAN
MARIANNE JENSEN
HANNE CECILIE GEIRBO
Telenor Research and Innovation, Norway

The workshop addresses the challenge faced by researchers in obtaining insights from marginalized groups such as, low-income youth and the technologically unconnected. These groups which have few opportunities to articulate their needs and opinions are usually presented with services and business models which may not be in line with existing norms, beliefs, and values.
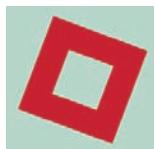
In this regard, the workshop seeks to highlight the use of photography as a tool to allow these "invisible" groups to share their experiences, and identify issues and concerns based on their own socio-cultural perspectives. Photo novella is discussed here as an alternative method to obtain market insights from low-income communities in Asian growth markets.

Through pictures that are taken by respondents themselves, dialogues are initiated which allows for the participants a more self-reflective interpretation of what is visibly rendered in photographs. This provides an effective way of surfacing individual and community worldviews, life conditions, needs and problems -- a significant entry point for introducing services that are more culturally-attuned and locally relevant.

The method may be used to obtain data that may not be revealed through more common methods. Discussion shall be made on the researcher's obligation to marginalized communities, both in terms of rendering them visible, but also in representing their concerns and interests to often powerful clients.

It can also be used as a tool for informing and inspiring in design and development of new product and services. Through focusing on the visuals, what is otherwise hard to communicate and get through to designers and developers regarding research findings are made visible in a way that is more attuned to the work processes of innovation. The photo may in this sense aid in transcending the borders of the different disciplines.

The workshop will explore the opportunities and limitations of the photo-novella as a method for making visible the worldviews and concerns of groups which are otherwise challenged. Further it will explore the potential of the method (visuals) in innovation processes.

3. Visible Narratives: Ethnography as a Foundation for Corporate Storytelling"

BRIAN RINK
IDEO

HIROSHI TAMURA
HIRONORI IWASAKI
KAORU TANAKA
Hakuhodo

This workshop will provide participants with tools with which to analyze critically the relationship between ethnography and the stories that corporations tell about consumers. Historically, companies' brand communications presented an idealized view of corporate values, such as "quality," "value," and "trustworthiness." Today, companies are increasingly using the context of customers' real lives as a powerful source of brand "content" (e.g. Dove's "Real Beauty" campaign).

This shift suggests an emergent (and ethically challenging) role for corporate ethnographers: helping organizations tell new corporate stories that focus less on product virtues and more on the lives and circumstances of the end-users whom they serve. This new kind of brand communication strategy seeks to appeal simultaneously to consumers' functional, social, and emotional sensors in order to influence opinion and consumer choice. It makes the once invisible contexts of real consumers and consumption (including issues like sustainability and social impact) more visible and transfers the role of "value interpreter" from corporations to consumers. How ethnographers will share their output to support this form of corporate storytelling is an unresolved question.

This workshop will advance the understanding of ethnographic praxis by exploring a more public and potentially important role for ethnographers in corporate storytelling. Workshop attendees will gain insight on approaches to influence and inform the portrayal of end-users in corporate and brand communications.

The "Visible Narratives" workshop will explore the connection between ethnography (stories used to create new products and services) and corporate storytelling (stories used to express corporate value, purpose and humanity). Through a series of hands-on exercises,

workshop participants will assess current communication approaches of representative companies and devise strategies to make the consumer narrative more visible and strategic.

   A brief overview of the workshop:
   Screen Presentation: Workshop facilitators will present an overview of the role of ethnography in corporate storytelling and a hypothesis for future directions. The presentation will explain a tool for understanding the intent of various communications strategies with explanatory case studies drawn from IDEO and Hakuhodo project work.
   Case Study Review and Synthesis: Workshop participants will be split up into separate teams to review Company Profiles and exchange opinions about a company's current communications approach and the potential role of ethnography in crafting richer corporate stories.
   Brainstorming: Attendees will brainstorm communications concepts that extend story telling into adjacent zones to create a more holistic and complete corporate storytelling strategy.
   Sorting and selection: Each team will select three storytelling initiatives and prepare a "pitch" that explains the value of the storytelling strategy and if and how the concepts more directly connect ethnography output to strategy and expression. Teams will present their storytelling approaches to the larger group and a general discussion will follow.
   This workshop's target audience is corporate and agency ethnographers, marketers and brand strategists. Participants should have a strong interest in deepening the connections among research, user experience and corporate/brand communications.

4. Doing 'Good' or Doing 'Well'? Developing Ethnographic Praxis's Intended for Business Development at the Base of the Economic Pyramid.

MIKKEL BROK-KRISTENSEN
ReD Associates

BO WESLEY
Novo Nordisk

   Base of the Pyramid, Emerging Markets or developing countries. With recent years unprecedented growth in a number of countries that used to be uniformly labeled "the developing world" large international corporations have become increasingly interested in the business opportunities in these countries.

The rapidly growing middle class in many of these countries (China and India among them) has provided new markets, but the majority of the populace in the Emerging Markets remains relatively poor and unable to afford the traditional products of most international corporations.

This, the combination of a large unexploited market and a moral/ethical responsibility towards the poorest employed by some corporations, especially those with products that are essential to personal health and wellbeing, have made numerous corporations engaged in projects with a broader intent than produce a sound economic return on investment. These corporations – many of them with HQ thousands of miles away – are facing a host of new challenges when committing themselves to do good (societal impact) and not just well (financial impact).

This has led to a wave of investments, where ethnographic research becomes a crucial element in the project design. Projects led by these corporations HQs with the purpose identifying the different issues at stake, understanding them and designing clever ways to address them with a business proposition. It is generally accepted that this is no easy task, but what is often forgotten is that an equally daunting task is to overcome the challenges that 'Base of the Pyramid' projects pose to the structures, processes, business models and competency needs of the large international corporation.
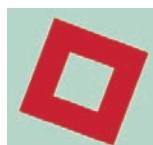
In many cases, projects are initiated by corporate social responsibility departments that are often detached from the daily business operations. A central challenge is to build acceptance and, eventually, ownership from operations (corporate and local production, sales, marketing and distribution).

It is our ambition with this workshop to set the scene for a multi-faceted discussion of the new challenges posed to ethnographic praxis within industry by this emerging interest in programs that set out to both do good and well.

It is our conviction that ethnographic praxis can assist corporations in their pursuit; but how this is done with greatest effect is the focus of this workshop.

During the course of the workshop the organizers will share their own experience and present a recent project conducted together. The workshop will focus on how to set up the project and create solutions in a way:

a) that will result in impact?
b) that are inclusive of the many different actors within a corporation?
c) that we believe are ethical and morally acceptable?
d) where ambitions of doing good are coupled with the ambition to de well enough for it to be a sustainable business?

5. Seeing Global Impact in Everyday Practice: A Creative Exploration of Methods for Researching Individuals' Perceptions of, and Responses to, Climate Change

SIMON BLYTH
JAY HASBROUCK
IDEO

SIMONA MASCHI
Copenhagen Institute of Interaction Design

JAY MELICAN
Intel Corporation

In addition to being the site for EPIC 2008, the city of Copenhagen is gearing up to host the UN Summit on Climate Change in 2009. One year after our community of researchers has gathered to ponder the potential significance of an ethnographic perspective for industry innovation, an international cohort of politicians will convene in Copenhagen to set out our nations' official positions on climate change and outline the framework for corrective and sustainable action that will succeed the Kyoto Protocol and lead us into the next, critical decade.

Leading up to this important event, Copenhagen will function as a hub in the globally-distributed debate, and as dispatcher in the free exchange of ideas suggesting innovative responses to the climate crisis. The Copenhagen Climate Council is a forum that exemplifies the city's role – a global collaboration of policy makers, scientists, and business leaders (including Paul Otellini, CEO of Intel) formed for the express purpose of supporting UN decision makers as they attempt to balance – on one hand – the need to radically readjust society's impact on the planet with – on the other hand – a range of individuals' (sometimes unsustainable) quality-of-life expectations, national development agendas, and worldwide demand for continued economic growth.

We believe that EPIC has something unique to contribute to the Climate Council's conversation, and that it is time the topic of climate change (and social perceptions of, and responses to it) became part of the EPIC community's ongoing conversation. As designers and industry researchers, we share some faith in human innovation as a source, not only of problems, but of solutions as well. As ethnographers, we understand that the everyday behavioral changes that will be required for an effective response to the climate crisis cannot be mandated. Indeed, successful design solutions/interventions are likely to be those that draw inspiration from established values and behavior patterns and support, emphasize, and encourage development of those best aligned with sustainable practices. The creative research methods pioneered by EPIC-goers, we believe, can provide unique and valuable insights into individuals' everyday experiences of the global phenomenon of climate change. In this workshop, we will ask: How do people perceive the often invisible "flows" of
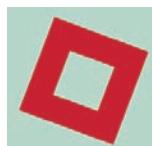
relationships between personal choice, material objects, and cultural forces? And what are innovative ways that we, as researchers, can learn more about those perceptions?

We intend this workshop to be both a forum for sharing of relevant research experience (methods and findings) and a collaborative, creative exploration of research methods particularly suited to sustainability-oriented projects. Workshop participants will be asked submit bios and brief position statements for distribution to the group before the date of the conference. In addition, participants will be asked to bring to the workshop materials with which to exhibit suggestions for an alternative research technique or theoretical perspective which lends itself to methodological innovation.

We invite EPIC-goers with experience or strong interest in:
- Research in sustainability (eco-technologies, green consumerism, energy efficiency practices, environmental movements/communities, etc.)
- Design for motivation or behavior change
- Design and everyday life
- Creative research methods

6. Exploring New Possibilities through Co-designing in Design Research

TUULI MATTELMÄKI
University of Art and Design Helsinki
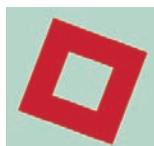
EVA BRANDT
Danish Center for Design Research / Danmarks Designskole

Design research and the applied methods share some of the characteristics to designing. One of the big challenges is to create fruitful dialogues about needs and design solutions that do not yet exist. It is not commonplace to plan user studies and design activities that make the invisible new design visible and valuable for future users. The benefit of experiential approaches is the process of co-exploring and the possibility of shared experiences offering the co-design team a common basis.

The workshop aim is to make visible some of the elements that drive the problem solution search especially when looking at user-driven approaches for design research. It is based on approaches that originate from design research and the practices of empathic and user centred concept design, aiming at gathering data but also, and in some cases in particular, creating and supporting processes of co-exploration.

The workshop aim is to make visible some of the elements that drive the problem solution search especially when looking at user-driven approaches for design research. It is based on approaches that originate from design research and the practices of empathic and user centred concept design, aiming at gathering data but also, and in some cases in particular, creating and supporting processes of co-exploration.

The goal is to create debate and share experiences with using various co-design approaches in design research. The organizers provide examples of empathy probes and exploratory design games that facilitate the visibility of exploration and engage people with various competencies and interests, and how the people studied can take active part in the analysis. It is not 'just' a question of making sense of the existing, but using this in the search for how things could be different.

7. Beyond Storytelling? From Thin to Thick with Video

PETER LUTZ
Philips Research Europe
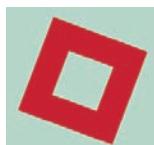
JAKOB HØGEL
Danish Film Institute

Storytelling has been praised as a key tactic for positioning the value of an ethnographic approach in industry, and video in particular is often readied to service this ploy. With their immediacy and tactile-like qualities, video clips are edited to breathe 'life' back into the fragments of reality collected in the field. These tales have a potential for 'stickiness' and easily lure audiences with their light, color, movement, voices and faces. But there is an undertow, a sticky situation, to this trend of positioning visual storytelling as value creation; at least within the current conventions that largely dictate its industrial application. We view this as the trouble of moving from thin specificity - i.e. the visual NOW - to the more illusive and thicker sociocultural abstractions beyond the frame. Thomas and Salvador (2006) have referred to this as 'the allure of the individual' while MacDougall (1995), referencing Nichols (1981), has termed it 'the problem of the person' in ethnographic film. But are there ways around such obstacles?

Orienting the notions of ethnographic montage (Marcus 1990) and filmic synthesis (Eisenstein 1929), this workshop aims to explore the alternatives of video montage for industrial praxis. Such developments have generally been viewed as artistic innovation, but here they are approached as viable analytic means and sense-making opportunities. The workshop has three main goals. First it gives participants the opportunity to discuss and

show their ethnographic video work. Secondly, participants are asked to pause and reflect on some of the more experimental modes of filmmaking, and how these might be incorporated in industrial praxis. Finally, it seeks to challenge conventional ways of thinking about video storytelling by posing a range of questions: How might alternative visual narratives 'read' differently? What opportunities exist for the unused materials? How does this relate to the sociocultural analysis at hand? Is there a balance between interpretation and representation; artistry and ethnography? What are the best ways of visualizing the polysemic open-endedness of everyday life? What might we learn from other one another's industrial practices and experiences?

8. Visualizing Experiences through Storyboarding

MARTHA COTTON
SCOTT TERNOVITS
gravitytank

Many ethnographers working in industry today are asked to inform the design of and strategy for consumer products. In the course of our work, many ethnographers are asked to follow a three-step process when it comes to the "design" of consumer products: 1.) observe human experiences, 2.) draw conclusions about observed behaviors and interactions, and 3.) translate these insights into a tangible product or service.
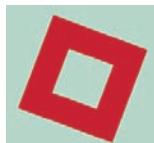
Our observation is that the ethnographer's confidence is strong in the ability to conduct the first two steps: collecting in-context and other data and drawing conclusions about the mechanics and motivations of what is seen. Much of our theoretical and applied training is focused on these two steps. Interestingly though, confidence tends to decrease significantly for the third and final step of applying conclusions toward the creation of tangible products and services.

This workshop will address the question of how best to demonstrate-to make visible-the kinds of products and experiences we feel ought to be delivered? Traditional approaches like prototyping are often deployed in a very limited fashion. Concept boards, models and written descriptions frequently give a very poor depiction of the interactions, emotions and experiences we typically espouse in research.

"Visualizing experiences through storyboarding" will begin to answer this question by taking inspiration from different industries. For many years, advertisers and moviemakers have simulated human experiences, and use these as "research." Over the years they have developed several techniques for storyboard prototyping that help them make decisions early in the innovation process such as: "What is the right look and feel?", "Where should we

spend money?", "What will resonate with viewers?", and "Who will find the production appealing?" By observing some of the best moviemakers in the world employ these storyboard influenced prototyping processes, we can learn how to repurpose their techniques and apply them to our own innovation opportunities.

This workshop will take attendees through examples of storyboarding done by the experts, as well as examine the rationale for how storyboarding can benefit the innovation process, and the process of making meaning out of ethnographic research. Additionally, attendees will practice some of the techniques by applying them to a real problem presented in the second portion of the workshop.

9. Making Visible the Object of Design in Anthrodesign
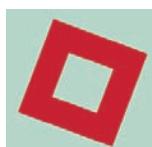
ELIN RØNBY PEDERSEN
Google Inc.

JEANETTE BLOMBERG
IBM Research

This workshop explores approaches to enable ongoing and sustainable connections between the design of technical artifacts (be they products or services) and the sites of use. Within the world of technology development there is a growing realization of the value of research about and with intended users of new products and services. The success of design, development and marketing efforts is clearly tied to understanding users and use situations. While user experience researchers increasingly are involved earlier in product design and development, they often are positioned as providers of a service and rarely have the opportunity to work side by side with developers and engineers in product teams. Instead information about users and use situations is provided to these engineering teams through meetings, workshops, or written reports supported by a variety of representational artifacts (e.g. scenarios, personas, user requirement documents). This division of labor creates problems related to bridging different languages, reward structures and professional and organizational goals, as well as the timing of knowledge transfers. These strict divisions of labor also creates a separation between the sites of intended use and the sites of technology innovation and development, reducing the chance for learning from the use situation and missing opportunities for innovation that could result from closer interaction between sites of use and sites where technologies get built.

Approaches have been developed for creating the organizational and work contexts for sustained interaction from technology conception to design, develop and adoption, but it has been difficult to embed these approaches in the corporate sites of technology production where too often user researchers work in organizational separation from engineering and product design. This workshop provides a forum for sharing experiences about challenges, obstacles, techniques, and tools for connecting technology design and development with the sites of use. Recognizing that different project settings call for different strategies, we will begin to develop a taxonomy of projects based on our collective experiences attempting to establish close and committed collaborations across the professional boundaries of user research and technology design and development. We envision and will propose a radically different relationship been ethnographic research and technology design and development, where technical and ethnographic expertise are more closely coupled.

10. Mobile Work and Mobile Lives: A Roundtable Discussion of Emerging Concepts and Themes Toward a Research Agenda

JULIA GLUESING
Department of Industrial and Manufacturing Engineering, Wayne State University
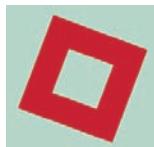
BRIGITTE JORDAN
Palo Alto Research Center

TRACY L. MEERWARTH
General Motors Research and Development

The mobile or remote work trends that have generated transformations in the global economy have also created major shifts in conventional workscapes and lifescapes. Technologies have increasingly divorced task from place and have made possible the de-territorialization of work and created the virtual workplace and the virtual organization with social and cultural consequences. Technological advances have allowed production facilities to expand into new territories, so that it is not just knowledge work that has become elusive, but the work that produces the items we use day-to-day has also become mobile, unbounded, and independent of particular localities. Employees, entrepreneurs, contract, and independent workers alike are feeling the shift in rhythm and are restructuring their lives on the societal level (i.e. regarding such things as Social Security and healthcare), and

personal level in terms of career planning, educational opportunities, and life path options. The format of the Mobile Work and Mobile Lives workshop will be loosely structured to facilitate as much open conversation and debate about mobile work and mobile lives as possible, so that themes and issues will emerge to spark research ideas that can be developed in academic, corporate, or other organizational settings. The co-organizers' previous investigations suggest that the topic of mobile work and lives has not been widely researched by ethnographers (with some notable exceptions), and often gets dismissed as obvious. The goal of this roundtable is to discuss, debate, and reflect upon the far-reaching and often invisible effects these trends have on workers' lives, lifestyles, and life options and to envision future trends that can guide the work of ethnographic practice and research. Our expectation is that some themes and new insights will emerge as provocative and useful and that workshop participants will take these with them to apply in their own their own understanding of and research on work and lives. We also see this workshop as a way of motivating a new community of researchers who are concerned with these issues and who might be interested in furthering research on these topics in the future. We have one book length publication in press, but are looking forward to uniting and integrating researchers in this area. Please join us.

11. See → Sort → Sketch: Pen & Paper Techniques for Getting From Research to Design

KATE RUTTER
LEAH BULEY
Adaptive Path

The rich world of human behavior is fascinating to observe, yet often difficult to interpret. Underlying goals and motivations lay masked beneath behaviors, essentially hidden from sight until our analysis illuminates them. Similarly, the meaning and opportunities inherent in the findings can be elusive for those who are responsible for taking them forward into organizational action. How can we bring clarity and insight to these areas through tools that are inherently visible? By using the analog favorites of pen & paper.

In this hands-on workshop, you'll experience a number of engaging activities that leverage the power of pen and paper as open, participatory tools. Using inexpensive tools that have a low-intimidation factor such as sticky-notes and Sharpies, you'll learn sticky-based note-taking, clustering and sketching as you explore the benefits of pen and paper to transform an abstract and invisible process into a more visual form. This makes it possible to

leverage the natural human affinity for seeing pictures and watching stories unfold, and use that to collaborate more efficiently and effectively.

We begin with a framework that is deceptively simple. Three questions guide the process through collecting research concepts, synthesizing learnings, and paving the way for action: What did we hear? What does it mean? And why does it matter?

What We Heard: Capture and Documentation of Data

Successful research hinges on effective analysis. You'll learn techniques for making field observations visible to the research team, and turning them into something that forms the basis of theories and strategies for design. Methods include: jotting and rapid concept sketching.
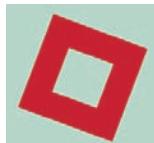
What It Means : Clustering, Synthesis and Interpretation

How do you take all the loose observations and ideas that you gather through field work and shape them into something that can form the basis of a viable design direction? You'll experience methods for making the full landscape of findings as visible as possible, and effective ways to capture and document the emergent patterns and themes. Methods include: capture boards, clustering, bottom-up trees, theme boards.

Why It Matters : Articulating and Exploring for Action

Once the big themes become clear, the next step is to start to explore what they mean for design. Again, you'll use simple pen and paper techniques that help get ideas out of the invisible space inside our heads and into a visible, tangible form that we can refine, evolve, and share with one another. You'll learn methods for structuring ideation sessions that ensure participation and engagement, and that result in concepts and design directions that pave the way to taking action. These methods include: mind maps, mandalas, 2x2s and grids.

At key points in the workshop, we'll talk through the processes covered, and hold a share-out to discuss your experiences and insights. You'll leave at the end of the day with a full toolkit of skills and approaches that you can immediately put to use to make research findings visible and actionable to your team, stakeholders, and business partners.

12.   Making Analysis and Synthesis "Visible"

LILLIAN SHIEH
Nest

RICHARD RADKA
Node

TETSUHISA FUJII
Hakuhodo

Often, analysis and synthesis can seem like a black box for external stakeholders such as clients. Even the team and partnering disciplines can get lost within the data, and experience difficulty in making the process explicit and thus more shareable.

In this workshop we led a discussion to share and explore best practices in making analysis and synthesis more "visible" in an ethnography-based innovation or new product development project. How do we manage data to help us "see" it in more productive ways, to help us make interesting connections? How do we balance prioritization or clarification of data with avoiding bias and missing what is there? What are the invisible aspects of analysis and synthesis that make it difficult to explain, sell, or involve stakeholders? We attempted to address both process and practice, as well as how to communicate principles, approaches, and results, from the perspectives of both internal teams and external consulting organizations.

As organizers of the workshop, we ourselves were interested in gaining new perspectives on how the goal of visibility influences the way we structure fieldwork, organize data and frame analysis and synthesis to create more value in and from the process. We felt that the diverse experiences participants would bring to this group discussion – the different types of organizations, project lengths and foci, interpretation and implementation objectives – would reveal a number of useful strategies that can be adapted by all of us for varied projects and purposes.

Participants in the workshop submitted descriptions or diagrams of their research processes, as well as key vocabulary they use to talk about analysis and synthesis. We also asked participants to consider the following question prior to the workshop: "How do you make visible the value of analysis and synthesis?" These preparatory activities and materials became the starting point for our discussions in the workshop.
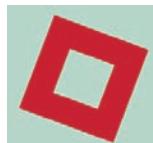
The workshop itself was organized into three parts – Process, Communication, and Conclusions. In Process, all participants introduced their definitions and approaches to the analysis and synthesis process and shared some of their biggest challenges in making the intangibles in the research visible to the team and other stakeholders.

In Communication, we moved from what we do in analysis and synthesis to how we talk about it. We wanted to uncover the recurrent methods and frameworks we must explain both in our teams and to others not directly involved in the research, and how can we again

make the research and its insights more visible, more directly accessible to a broader audience.

Finally, our focus was to turn the content of our workshop conversations into useable outputs for all participants. As a group we identified the main themes, challenges, and opportunities from our discussion and captured initial descriptions of learnings and best practices related to each.

13. Capturing the Intangibilities of Virtual and Physical Spaces

BETTINA HAUGE*University of Copenhagen*

KATJA ØDER HANSEN
1508 A/S

In this workshop we will explore the crossing between physical worlds and abstract products and processes 'hidden' and/or difficult to conceive for those people performing the actions and/or using the products. The theme of the workshop is that of intelligent housing. The field of intelligent housing faces a particular challenge of making intangible processes and elements tangible. The home is – if any – a place that is soaked with social significance. This applies not the least to the products that we decorate our homes with. In fact many products in the home are intangible like energy, wireless connections, light, heating etc. Still these products are essential for the ongoing process of creating a home and feeling at home for its residents. The home is also the nest of routine behaviour in terms of using the products and 'living' them. The practices we perform in our homes are to a great extend actions that we hardly ever reflect upon.

Producers and researchers working with intelligent housing face the challenge of exposing everyday habits and unreflected needs and demands in order to both support and change our way of living through intelligent controlling systems that encompass both physical devices and virtual interfaces. While virtual worlds and intelligent technologies seem to have gained increased use in different fields all over the world, ordinary houses still appear rather unaffected. Intelligent housing is incipient and therefore difficult for inhabitants to conceive of. So what kind of methods can be used to explore these intangible elements that are hard to conceive? How do we explore practices involved in physical and virtual spaces that are hardly reflected upon –if at all? And how can these explorations be part of the process of creating new abstract products? The scene for the workshop will be set by a presentation of methods and techniques used in two cases of intelligent housing. The main activity of the workshop will be to play with a Doll's House, which has proven to be a helpful method in order to reveal everyday routines, needs and preferences in relation to light and light control systems at home. The aim of the activity is to gain experience, create methodological reflections and to further develop the method by applying the work areas of the workshop participants.

14. Learning and Doing a Charrette: Exploring Solutions for Homelessness in Copenhagen

BETH JOHNSON
KRISTIN JOHNSON
Continuum
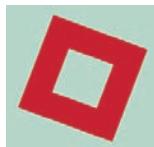
CHRISTINE MILLER
Savannah College of Art and Design
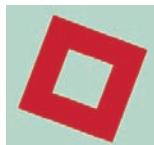
The "charrette" is a tool traditionally used by designers to come up with solutions to challenging problems in a very brief amount of time. We propose that the "charrette" is also a valuable ethnographic tool for quickly uncovering deep user insights. By bringing various stakeholders together to tackle a problem, an iterative process with feedback loops can also be collapsed in time. We think that the use of this rapid process will make it more possible

for designers to engage in issues of social concern, where budgets are traditionally very tight.

To illustrate the usefulness of the charrette in ethnography and design we will run a charrette focused on finding solutions to specific problems resulting from homelessness. Many of these are problems face by homeless people regardless of their location and context.

Exploring solutions for homelessness has an interesting connection to the EPIC theme - Paradoxes and Practices of In(Visibility) - on two levels. First, by focusing on and working with a typically invisible population - the homeless - and, second, by engaging in transdisciplinary/cross-functional collaboration, which tends to surface intangible differences such as work practices and terminology embedded in professional and disciplinary approaches. Our goal is to explore how, within the framework of the charrette, negotiating shared working cultures enables us to work through these issues and arrive at the insights that guide people's decisions.

Telemedicine Services in Extremadura (Spain) Potential Uses for an unknown technology: Datamatrix 2D Barcode
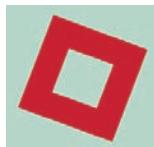
MARITZA GUADERRAMA
dnx

The first project (poster) describes the research methods applied for getting information from patients and medicine doctors that has allow to design a Telemedicine Services for the Health Department in Extremadura (western Spain). that would be able to (a) daily remember the patient his/her doses of drugs and (b) send a daily status for each patient to the closest health service center.

In order to understand the context of the service and to design a device (pillbox) and an interface (mobile) adapted to the patients needs, we developed a fieldwork conducting in-deph interviews with epileptic patients and moderating focus groups with his/her family members and a group of family doctors. In addition, contextual observation was conducted both at the patients' homes and the Hospital.

The second project (video) was aimed to find out a set of potential uses for an unknown technology, a datamatrix 2D barcode, from the average people's perspective. To this end, we developed a study applying the "cultural probes" approach, giving the participants a set of "magical stickers" and a mobile with video camera so, the participants could select and register potential uses of a mobile-PC connection technology, although they didn´t know anything about it. In addition, a virtual community platform allowed to participants communicate each others and with the moderators.

Revealing the Invisible

CHRISTINA WORSING
Ideo

　　Revealing the Invisible, a series of light-based installations, was conceived during Dott 07 Design Camp held in Allendale, England. The camp was supported by **Dott 07** (Designs of the time 2007), a two-year span of community projects, events, and exhibitions based in North East England exploring what life in a sustainable region could be like and how design could help us get there.

　　Fifteen designers from eight countries came together to make up the three teams for the Design Camp. Each group worked with Dott staff, local coordinators, and the local community to develop ground-up approaches to their design challenge. Three opportunity areas were addressed: urban camping, wind-power, and our team's topic, industrial heritage. Our team of four designers was given eight days to research and develop design opportunities for the local industrial heritage of Allendale, a former mining town located 30 miles west of Newcastle.

　　Allendale is an area known for sheep farming, lead mining, vast, rolling landscapes and its strong sense of community. We gained design inspiration by exploring the natural, social, and built environments through observations, tours, and informal interviews held with community members.
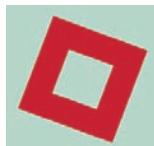
　　During the 18th century, Allendale was the epicenter of England's lead mining industry. Although the industry no longer exists, it still remains in fragments and impressions in the landscape. What we found was a community that has a deep connection to the history of the area and interest in preserving its memory. In their community activities, festivities, and commerce, they continue to keep alive the ways of their agrarian and industrial culture. As Allendale struggles with a younger generation leaving, they recognize the limitations of their small village to provide diverse opportunities. At the same time, they believe Allendale to be a unique and desirable place to live and visit specifically because of its heritage.

　　Our design solution*, Revealing the Invisible,* celebrated the forgotten lead mining industry of Allendale located in the North Pennines. What struck us deeply were the invisible elements of the town's lead mining past. Much of the physical evidence of Allendale's industry appears to have faded away from decay and the slow consumption by the natural environment. With the desire to illuminate the invisible moments of Allendale's industrial heritage, the team proposed a series of light-based installations to fill in the gaps that time and space has erased. Light provides the proof our eyes often require to make

sense of a physical world that no longer exists. At the same time, light also taps into the ephemera and fleeting nature of an intangible reality that remains intact.

These installations were sustained by hydroelectric power from the Allen River and ran continuously yet were most pronounced during the evening hours. They were in place for two weeks and coincided with the Dott 07 Festival held in Newcastle. Our hope was to create a tourist experience that was powered sustainably and enabled people to experience the remaining bits of Allendale's history in a thoughtful and engaging way.

IT Management and Practices of Small Business

SUBHASHINI GANAPATHY and GLEN J. ANDERSON
Intel Corporation

Small businesses often require information technology (IT) to stay competitive in the modern world, but IT management is rarely anyone's full time job in a business with 20 or less employees. Intel researchers performed in-depth interviews with small business employees in the United States and the United Kingdom who have part-time IT responsibilities to understand their context and challenges and help identify categories of IT management that are common across these businesses. We spoke to people in a mixture of industries, such as wholesale, manufacturing, staffing, and graphic design. We observed how the IT administrators interact in their office settings, the office setup and infrastructure. Several themes about small business IT emerged. IT planning and purchasing is often ad hoc: these businesses work with the technology they have until something breaks or new employees require new systems. Small businesses often operate without redundant systems: when a system, such as a computer, breaks, employees must scramble to keep the business productive. IT is a mixed and legacy-filled environment: various computing systems and peripherals accumulate over the years and fill important niches, making new IT difficult to integrate. IT responsibilities fall on busy people: often all employees rely on one person, who also has a regular full time role, for their IT help.

The Practice of Seeing: 2 Examples of Teaching New Methods to a Product Development Community

KEREN SOLOMON
Intuit

This poster describes two examples of successfully bringing in new research methods to a product development community in a consumer products software company.

The first example describes the process of teaching people about a research method that is already being used by many ethnographers and researchers – photodiaries. Photodiaries let research participants use a digital camera to document themselves and their world, without the presence of the researcher. This concept of self-documentation provides a new way of seeing – in fact, it explicitly enables the researcher to be invisible yet still get deep knowledge and insights. By shifting control of the research experience from the researcher to the participant, new vistas are opened up. The photodiary research method had not been used at the company before, and teaching people about it required both outreach and education. The author describes her experiences and the experiences of researchers, designers, product managers and product developers who tried using the method for the first time.

The second example describes an "experience activity" workshop that the author co-facilitated as part of an internal Intuit conference. The goal of this workshop was to increase participants' "awareness quotient" – that is, their knowledge and experience of the world around them. Participants were encouraged to "see differently" and to apply what they learned in the workshop to their daily roles as researchers, designers, and product managers. Workshop participants broke into 3-4 person teams and were given an envelope that contained the name and location of a store, museum, hotel, park, or tourist attraction in San Francisco. They then had to go into the field, consciously and deeply observe this place, and analyze what factors created a particular "experience." The teams then re-grouped and shared their findings and insights with the larger group.

Why are these 2 examples important? At many companies, the idea of doing contextual research or fieldwork is relatively new. At Intuit, there is a very strong and longstanding tradition of contextual customer research (often internally referred to as "follow-me-homes"), and a deep interest in learning new research methods that get richer insights about customers and problem spaces. These two examples illustrate ways that people who are engaged in the product development process can get new customer insights <u>directly</u> (by

letting customers engage in self-documentation) and <u>indirectly</u> (by increasing their own awareness and drawing inspiration from the larger world).

Example of photodiary workshop teaching aid

The Delphi Party Service

JESSICA CHARLESWORTH
Sense Worldwide

Whilst studying Design Interactions MA at the Royal College of Art under the tutelage of Anthony Dunne, Fiona Raby and Nina Pope I created a body of research entitled "The Future of Self-Knowledge" This became an on-line resource **[www.fateinstitute.org]** exploring the future implications of predictive gene testing. I investigated and cross pollinated a number of techniques and methodologies used in corporate horizon scanning & forecasting, ancient divination practices and the rise in popularity of commercial predictive gene testing services currently available.

As a result of this investigation I created a fictional space for exploring the implications of ways of interpreting the future. This took the form of a fictitious futures institute called The Futures Association for Therapy & Entertainment or THE FATE INSTITUTE.

CONTEXT:

THE FATE INSTITUTE is a privately endowed quasi-scientific research & therapy institute that provides an holistic approach to developing personalised future forecasting services. The institute is responding to the growing unilateral belief in our (in) visible futures that are being determined by commercial predictive gene testing services in the UK & US for example 23andme, DecodeMe and DNA Direct and the potential marginalisation they may engender. The FATE institute acts as a vehicle to embed a variety of services within a speculative scenario.
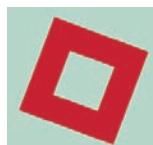
THE DELPHI PARTY SERVICE:

One service that is on offer at the FATE Institute, is The Delphi Party. It draws on the area of corporate forecasting known as the Delphi Technique, where a roomful of experts are brought together in a workshop format to determine the future likelihood of a certain technology being adopted and utilised in society. In place of industry experts, friends and family members of a loved one are drawn together under the guidance of an experienced facilitator from the FATE institute to discuss his/hers future life path.

The Delphi Party service is an experiment that deals with similar methods used in ethnofiction where documentary film blends in with fictional film. The Delphi party participants react in real time but set within the fictitious scenario of the FATE INSTITUTE.

The Delphi Party uses the collective mindset of the people in the room to project their ideas of an invisible future of their loved one who is not present. The FATE facilitator guides the "panel of experts" to generate their own speculative outcomes of possible, probable and/or preferable variants of the loved one's invisible futures.
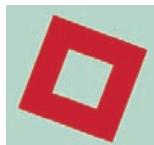
As the loved one is not present during the Delphi Party what might happen if the loved one were to watch this edited version of the Delphi Party? Will this speculation about his/her future actually elicit a self-fulfilling prophecy? Would the presence of the loved one in the Delphi party hinder the honesty of envisioned futures by the "panel of experts"? Does the female praying mantis actually eat her lover or does she just do it because she knows she is being watched?

Food Distribution Systems, Buying Practices, and Human Relationships

SOPHIE DATE
Fit Associates, LLC

This entry describes a student-led summer internship to investigate food distribution systems, buying practices and human relationships, with the intention of making local foods available to average person in Pittsburgh Pennsylvania (not only those already involved in the movement). Our goal was to use ethnographic research as a tool for social impact and as a catalyst for new conversations between people in each niche of Pittsburgh's food system. We spoke with individuals from different sectors of the local food system, from an anthropological perspective, to learn about their challenges, joys and needs. As we spoke with farmers, distribution co-operatives, grocery stores, restaurants, and shoppers we found that they were all frustrated with the current system, but were not sure how to fix it. We found there is room for system growth and wanted to find a way to initiate. Our goal is to share our gained knowledge to improve the system from all perspectives by replacing frustrations with increased understanding. We can enhance the system by beginning with an effort to understand each other, communicate more efficiently, and better educate our customers.

From Logs to People: Field Research at Google

JENS RIEGELSBERGER
OLGA KHROUSTALEVA
Google Inc.

We found this artifact in the home of one of our participants in a recent ethnographic study for Google Maps. It is a map on the fridge, placed close to the entrance to the apartment. The couple living there share one car, but they do not have a regular parking spot. They don't use the car daily, so, to avoid having to wake each other in the morning, they

349

mark the location of the car with a small magnet. Now, it is interesting that the whole purpose of the map is to show where the car is relative to the house – but the house itself is conspicuously absent from the map. Its location is so evident to the couple that they did not even bother marking it. This small vignette illustrates, in a metaphorical and practical sense, the role of User Experience Research at Google.

First, the metaphorical aspect. Google prides itself as a 'data-driven' company. Like other online companies, we can learn much by looking at anonymised logs: analysing aggregate click behaviour and conducting online experiments, for example.

Now, there may also be something conspicuously absent from these logs. They tell us what people do when they use our products - but we gain little insights into people's true needs, their workarounds, and their assumptions about what our tools can or cannot achieve. It is our aim to bring this reality (which is invisible in our logs data) to the awareness of our product teams.

In the practical sense, the ethnographic study from which the photo above is taken, illustrates several aspects of our daily work. We asked a number of informants to keep a diary of every instance they looked up geographic information. Our focus was broad: Did they look up Chad in a World Atlas? Did they look for directions to another town? We followed up with a small team of colleagues, visiting participants' homes and speaking to them about the incidents they had reported, about the tools they used, and about the artifacts they had created.

The purpose of the home visits was twofold. First, by conducting these interviews in the participants' environment, all the artifacts were present and could be observed. Secondly, by bringing our colleagues to the place of use, they could see first-hand in what context – and under which constraints – Google's and competitor products are used. In addition to building empathy within the development team these visits also helped to dispel common stereotypes about our users. The field team saw many seemingly technologically accomplished users struggle with simple tasks, but also had to admire the inventiveness of others who dealt with the shortcomings of their technological setup in ingenious ways. As an example, one participant who may have been easily dismissed as 'non-savvy', due to her very outdated IT setup, was essentially the multi-tasking information hub for her family - constantly experimenting with advanced features of Google Maps in an attempt to manage the demands placed on her.

The Social Action Process: From Corporate Social Responsibility to user-driven Corporate Social Innovation

TOBIAS LAU
Social Action

The Social Action Process is a user-driven approach to generate market growth by solving global social and environmental problems.

Social Action is a consultancy and development firm specialized in user-driven corporate social innovation. CSI covers projects and initiatives that create new markets by solving environmental or social problems around the world.

Working across the globe, Social Action has developed a tailor-made process to build new market growth by focusing on blue ocean markets with perspectives to solve global social or environmental problems. The process has been used by companies such as LEGO, Nokia, The Danish Recycling Company and Aarstiderne.

Not your normal use of ethnography

In contradiction to traditional user-driven innovation, user-driven CSI demands new methods to engage action. The subjects and challenges touched in the CSI process are too severe to leave to bare numbers and cold findings.

Method: 'Growing Purpose Awareness'

The process often starts in one company department. Over time, engaging the entire company in new CSI endeavours proves valuable and helps employees to believe in the company's purpose on a deep societal level that sparks new employee entrepreneurs and galvanizes audacious new ways to innovate.

Method: 'Travelling to Emergent Trends'
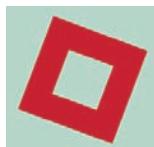
The process demands new ways to engage end-users with the company's top management. This is done during specially organised trips to often rarely visited places of the world to let key employers and managers experience new emergent trends first-hand.

Method: 'Using Authentic Stories for New Business Plans'

Sharing authentic stories from around the world is often what triggers the best ideas and arguments to allocate time for new business thinking. Such stories are best visualised through video and animations that helps decision-makers get an overview of the opportunities in the CSI field.

The process has been developed over the last few years in order to make it easier for companies to create positive impact in the world while safely growing their business. Working closely with companies' New Business departments, CSR departments and Product Development departments have generated valuable experience in the field of CSI. A wide range of disciplines at Social Action secures an always open and extensive mindset to guide

the process. Such disciplines include ethnography, business, architecture and industrial design.

Near-Future RFID

ANAB JAIN
Microsoft Research

NICOLAS MARQUARDT
University of Calgary

ALEX TAYLOR
Microsoft Research

In this artifact submission, we present alternative, speculative visions around RFID, drawing attention to the possibilities of using the technology to connect people in curious, even celebratory ways. In our visions, RFID tagging and sensing has been extended so that tags and sensors allow individuals to build associations with digital content in the physical world. This tagging system allows people to instrument their environments for aesthetic as well as practical reasons. Moreover, people manipulate, extend and constantly update their digital selves. The RFID infrastructure is this used as a performative resource. One consequence of this is that ideas of self and privacy are altered dramatically as personal information, that was once invisible, is made visible and appropriated into a new aesthetic sensibility.

We present a selection of conceptual artifacts and narratives based on the above speculation. In doing so, we loosely draw on what has been termed *critical design*, a perspective that employs design to provoke thought around the possibilities of certain technologies, and open spaces for debate and reflection. RFID readers are subject to a similar examination.

Conceptual artifacts:

The presented artifacts explore the scope for RFID tag design. They use the conventional RFID tag design as a starting point, but aim to provoke new ways of thinking about tags in everyday use. RFID readers are subject to similar explorations; their designs are considered in terms of the speculative visions below.

Speculative visions:

The speculative visions imagine RFID being incorporated into established online, social networking practices. Here, though, physical tags and readers take on prominence.

From small familiar RFID antenna on bespoke jewelry to largescale experimental wallpapers, invisible tags become visible and contribute to new aesthetics. Tagged accessories are worn to manage different levels of intimacy, content and broadcast range. Users associate these accessories with digital content using an online service, and use their Mobile Readers to scan the environment for content published by others.

We present the *Body Ranger* to envisage the uptake of RFID by particular communities. This RFID reader, incorporating headphones, is designed to sense RF emissions over long distances.

Sounds are associated with tags so that a user can continuously hear changing audio content as he/she moves through physical space. Any visual content can be viewed by pointing the device in the direction of a RFID tag. Exploiting this, community members physically tag their neighborhoods and adorn themselves with elaborate tattoo-like antennas attached to RFID chips. Using the Body Ranger, digital content thus constitutes a traversable geography interleaving features of the physical and audio-visual.

While some may choose to openly broadcast content, we imagine others remain fearful and suspicious of the tracking potential of RFID. The *Head Guard* is envisaged as a device to counter such fears. It consists of a long-range RFID reader attached to a headset. It buzzes and vibrates when a tagged person or object approaches. Recorded data can be fed into a computer and visualized in different ways. The Head Guard protagonist is imagined spending his days scanning his neighborhood, obsessively rendering the generated data in different ways.

Beneath Bias: Kids with ADHD

RIC EDINBERG
Research, Strategy, and Design Consultant

1. Physical Description of Artifact

The proposed artifact is one poster in a series of posters designed to communicate a "day in the life" narrative about children and their families living with ADHD to a

pharmaceutical client. This client, though making a drug for many years, had in fact very little understanding of the people who bought and used their products. They were interested developing a communication strategy to better interface and connect with the patients and caregivers they serve.

These posters helped to completely transform our client's perception (as well as our own) of what real life is like for ADHD families. Important stories are depicted with smaller images and text compiled from contextual interviews, observations in homes, schools and medical visits with families
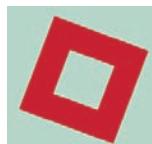
2. Proposal: Detecting, Confronting and Moving Beyond Bias in Research

We can and often do medicate children, even small children who have behavioral conditions that are difficult or impossible to diagnose. This is of course a contentious issue, to say the least. It is quite easy to have an opinion about such medical matters without having any direct exposure to the science, or to social reality - I certainly did before I participated on this medication study of children with ADHD ages 6-12. I was totally appalled and nearly did not participate on the project for these very reasons. I did the research, and my views became much richer, much more grounded, and totally changed forever. Research can humble you sometimes.

My intention with this particular poster is to stimulate discussion with attendees about confronting their research bias: for researchers as well as for clients.

Although simple, these posters were highly successful in replacing a numerical segmentation model based in sales with a human face behind the segmentation models, in this case for a communication strategy for drug distribution. Segmentation models are built out of real people, and these people are sometimes struggling with highly emotional and complex social situations, and often left totally unprepared for the behavioral ride awaiting them as families.

It was a large enough study (40 children in the US, home/school/medical office visits, 8 hours each) that the "facts on the ground" led me to confront my own pre-conceived thoughts, to re-humanize them in my and ultimately in my clients' perception. This, of course, is a larger topic than this particular example, but it is a fruitful one to use to further discussion. Given our influential role in many types of product and service development, and the increasing constraints placed upon projects with less time and budgets, it seems a fundamental problem we face as a profession.

Ethnography, Videography, Reality and other Artifices

INGA TREITLER

ANTONELLA FABRI

JASON ENG
Ceylon Road PL

JO YUNG
Pacific Ethnography

Introduction

Is videography the key to knowledge creation for corporate clients in early 21st century praxis, just as ethnography had been during the information and telecommunications revolution? And if so what does this say about the do-not-disturb edict that has driven the ethnographic literature throughout its hundred year history—that edict which is in fact responsible for the popularity of ethnographers in business?

In exploring this fundamental challenge to the roots of the participant observation method, this artifact presents a model in images and video of three modes of intrusion on the research stage as the production team works together to create for a client a sense of viewing and understanding an element of life in progress.

Background

Videography in combination with ethnographic observations and interviews is not unproblematic.   Phenomenology has established a theoretical framework that helps ethnography work with the serious constraints that exist on understanding what is really there (Clifford and Marcus 1986), but the limits on such naturalistic observations become more apparent when a video camera and a production team are involved in creating knowledge, as has been noted in Mead and Bateson's widely read, fractious discussion about the proper use of the camera (Mead and Bateson 1976). In the end, videography-ethnography production suggests that perhaps "pure" and undisturbed "reality" truly is an artifice.

We place this artifact at the juncture of innovation in ethnographic method and theory and submit the view, in agreement with Latour (2004), that we can create deep knowledge of a situation even while intruding upon and disturbing that situation. We formalize three modes of intrusion (or mediation) though in actual fact the functions described are just as likely to be carried out by one person in shifting roles as by multiple individuals assigned definitive "tasks." The client is not designated in the tripartite model but often is part of negotiations over method.

Three scenarios:

Videographer directed/mediated product. Videographer directs the research participant as well as the ethnographer. The videographer responds to the ethnographer's and participants' sense of what is important, and structures the setting in a way that the production value of the scene is enhanced.

Ethnographer directed/mediated product. Videographer captures the conversation and the overall interaction among participants and ethnographer—sometimes being stationary, sometimes accompanying participant on daily goings on. Videographer and ethnographer are occasionally part of the taped footage.

Participant directed/mediated product. The research participant has an agenda and brings things to the taping sessions, or directs what the videographer is to capture. The videographer role is more of a technical function, and the ethnographer may be nearly absent.
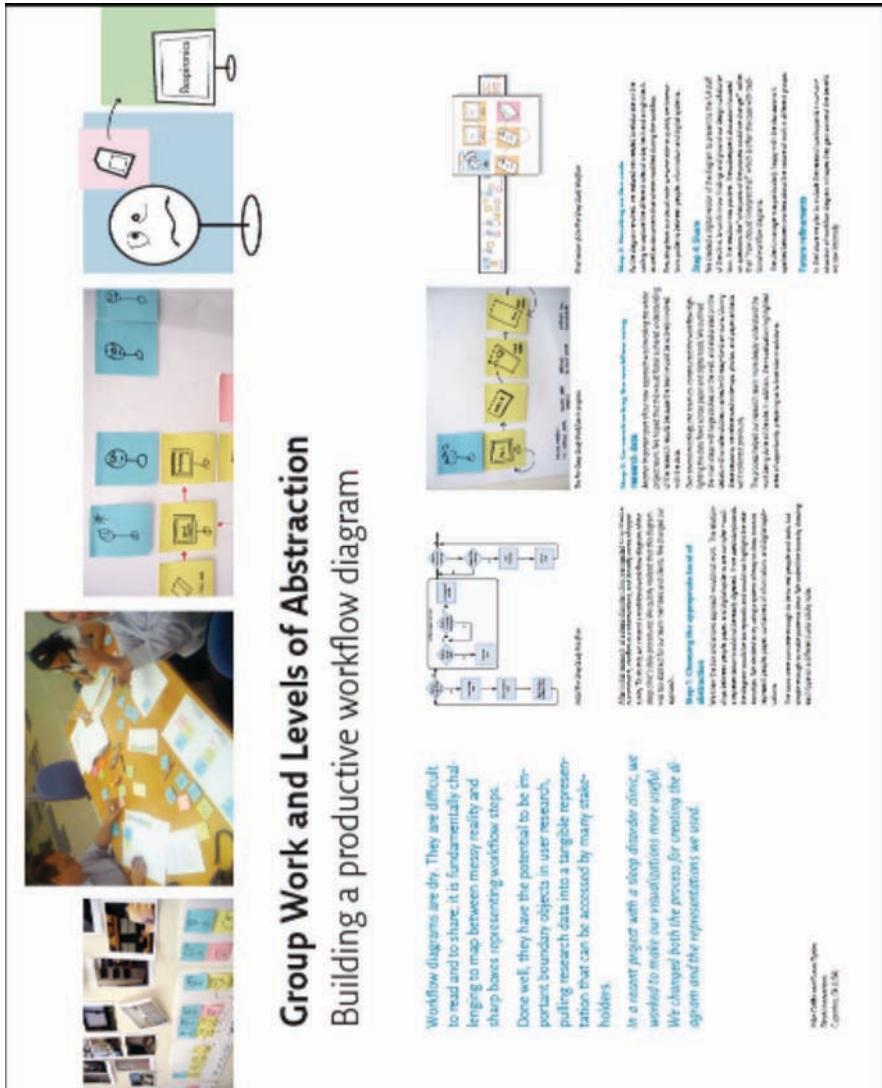
References Cited

Clifford, James and George Marcus (eds)
1986   *Writing culture: the poetics and politics of ethnography.* Berkeley: University of California Press.

Latour, Bruno
2004   From Realpolitik to Dingpolitik; or How to make things Public. An exhibition at ZKM Karslruhe March

2005   http://makingthingspublic.zkm.de (last viewed September 18, 2008).

Mead, Margaret and Gregory Bateson
1976   For God's sake, Margaret, Conversation with Gregory Bateson and Margaret Mead," CoEvolution Quarterly, Vol 10/21.

Group Work and Levels of Abstraction: Building a Productive Workflow Diagram

MIKE GRIFFIN
SUSAN DYBBS
Ricoh Innovations

Excavating Parameters

LARISA SITORUS
JARED DONOVAN
MADS VEDEL JENSEN
University of Southern Denmark

Refrigeration controllers are computerized products that regulate the functioning of complex refrigeration systems such as those used in supermarkets. Since these systems vary from location to location, it is the job of refrigeration technicians to configure the controllers so they fit with the rest of the system. We have been involved in a research project to investigate possibilities for improving configuration practices of refrigeration technicians. Part of the infrastructure that supports this practice is the collection of parameters that can be configured in various ways. However, we found it difficult to understand the hundreds of parameters buried inside these refrigeration controllers. Therefore, we set out to *excavate* the parameters to uncover the underlying structures and identify areas that can be improved to support technician's practice.

Excavating parameters in our project unfolded in four workshops where we integrated ethnographic insights with design material and representations of parameters in order to provoke discussions about configuration practice. Instead of uncovering a single and clear structure of parameters, we came to see that in practice, parameters are made sense of through multiple and dynamic structures situated in distributed locations and various events. Further, multiple interacting practioners continuously develop, use and maintain these parameters.

For EPIC 2008, we present the following artifacts, which we designed to trigger discussions across sites and practices:

Parameter cards

We transformed a parameter list into cards to make it possible for various stakeholders to directly handle, group, carry and place parameters as they explain the way they work and deal with parameters. We used these cards in sense-making workshops involving refrigeration technicians and software engineers.

Artifacts

Configuration interface mock-ups

To provoke discussions around the relations between configuration interactions and parameter structure, we designed tangible interface mock-ups, which address the relation between skilled, bodily interactions and complex parameter relations.

Parameter structure models

We also developed

several graphical models of parameter structure as representations that mediate our discussions with system engineers. Most of these models worked as metaphors in sharing narratives about technicians' interactions with the system and the various parts of the plant that technicians deal with when configuring the system.

Video action wall

Video action wall is a tool that we used to analyze technicians' configuration practices, specifically the qualities of technicians' current bodily interactions with current configuration technologies. The wall consists of movable short video clips, gathered during our ethnographic field studies.

Field Video Visibility in a Corporate Setting; engaging audiences and maintaining data sanctity

SUSAN FAULKNER
ALEX ZAFIROGLU
Intel Corporation
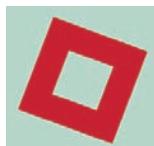
Intel's User Experience Group has created hundreds of hours of video. Most of it was shot by us during home visits with over 600 households in 22 countries in the past three years. Recently we have provided small video cameras to our research participants and the short movies they create having been added to our growing digital video files. We now possess a large video archive the vast majority of which has only been viewed by the researchers who were present for the ethnographic visits. Like so many other producers of ethnographic video our challenge is to find ways of bringing our rich media content to the attention of colleagues and find innovative ways to make sure it inspires and informs the design process in Intel's Digital Home Group.

We are now grappling with how to make visible the value of this data archive to our internal stakeholders and our wider internal corporate audience while respecting the guidelines outlined in the release forms signed by our research participants. How do we make the best use of this powerful and sometimes deeply intimate data while following the privacy guidelines agreed upon with our research participants? How can we make it easily available for viewing by our stakeholders while providing guidance and insight as to how it should be interpreted?

One solution is to launch a weekly interactive video blog on our research group's internal site where we present 5-10 minute clips of fieldwork-based video framed by a discussion of the data by the researchers who conducted the field work. Viewers are invited to submit comments and questions about the video which generate discussion not only about the data itself, but also about the implications for the products that our company produces. The owners of the video blog and the researchers also participate in the blog.

The artifacts we will present at EPIC 2008 include several examples of video blogs. In our presentation, we will discuss the challenges of creating, disseminating and making the best use of ethnographic video in industry.

Making "Mediascape" Visible: Usage of Media in Japan and Korea via Home-visiting-method

AYA KUBOSUMI
NORIKO OHARA
Imaging Culture Research Institute, Konica Minolta Technology Center, Inc.

In order to determine the characteristics of media usage in Japan and also to anticipate its future, we carried out comparative media usage surveys in Japan and Korea which is a little further along than we are using the Internet. As an inclusive survey method, we employed home visits in view of the following points: family, an individual and mutual relation ship of the characteristics of media usage and an assigned space. We extracted typical patterns through the prediction of family composition after 10 years in Japan. As a result, we visited 10 Japanese homes and 8 Korean homes. In order to make their "mediascape" visible, we asked each family to illustrate drawings of its house and put pictures of media in their houses, which is an essential part of everyday life on these drawings.

From these visits, differences in the degree of networked communication activities, in the younger age group's IT literacy, and the state of PC installation in the homes were observed. The differences were analyzed with the viewpoint of cultural factors, such as the degree of self motivation and sense of privacy environmental factors such as a development infrastructure of web based, and political- economic factors such as emphasis on IT in the educational system.

Consequently, it was found that communication style which guesses a partner's situation, and a high sense of privacy will may affect the future of Japanese media usage. On the one hand, Japanese families have a lot of media, with many concentrated in the living room including PCs with Internet access. On the other, PCs in Korean homes are mostly put in each private room.
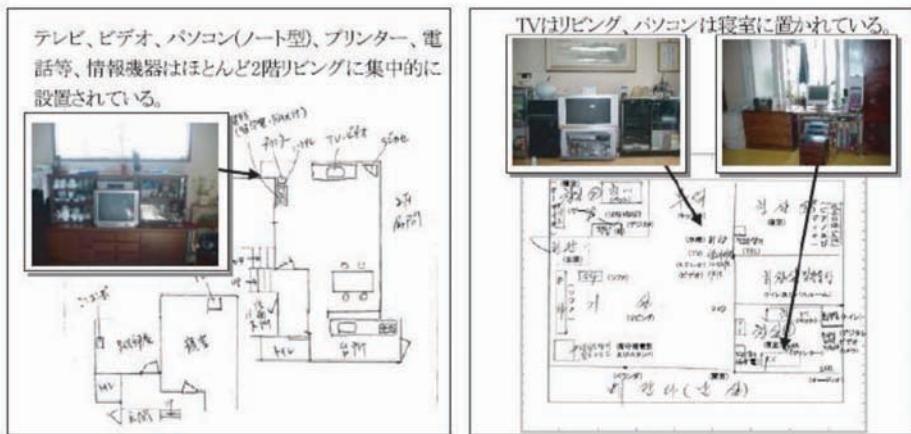
Fig.1 Layout of media in a Japanese and Korean home with a high school student

Putting the Person in Persona

DENNIS NORDSTROM
REBECCA DENSON

Background

Following some of the discussions that have been going on within the interaction design discipline about methods and the utilization of personas, we have come up with ten methods for how to bring more focus on personas and utilization of these. Specifically we wanted to bring more attention to how designers can bring back the original intention of Alan Cooper (Cooper, 2004), in that a persona is meant as an instrument for informing design more than it is meant as a means of communication to stakeholders. Therefore our ten methods aim to bring back the relevance of personas by bringing focus on how designers can develop a better understanding of these personas and the persons behind them. The activities are developed to inspire creative ways to make end-users more real and help qualitative research come alive. We want to emphasize that these activities all are based on the assumption that personas are being developed on an understanding achieved by talking to people through ethnographic research. Thus, we developed the activities with the viewpoint that the development of personas is grounded in contextual inquiry.

Persona Activities
1) **Role-play:**
   Role-play the persona in & out of context. Take on the persona and adapt the persona's points of view.
2) **Persona Board Game:**
   Act out scenarios with constructed "environment maps"(Beyer and Holtzblatt, 1999) and with a set of small doll-personas.
3) **Documentary:**
   Create a short video-documentary about the persona that can be shared with the design team.
4) **Artifacts:**
   Inspired by Bill Gaver's idea of cultural probes(Gave, Dunne and Pacenti, 1999) create photos, journals, and other artifacts that document a persona's life.
5) **Facebook:**
   Create a Facebook profile for your persona and have the design team "interact" with them on Facebook.
6) **A day in the life:**
   Document a day in the life of your persona. This can be done through a journal, a comic strip or even through creating a Twitter feed for the persona.
7) **5 years from now:**
   In a group, discuss what the personas life will be like in 5 years.
8) **Stranded on a desert island:**
   In a group, have each person take on a persona and answer the question: If you were stranded on a deserted island and could only take 5 items with them, what would they be?
9) **Bank statement:**
   In a team, create a bank statement for the persona. This will help teams think about the persona's daily activities, lifestyle, needs, and priorities.
10) **Google them:**
    In a team, create a list of what the search results would be if you googled a persona.
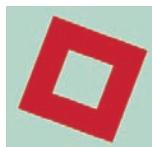
References Cited:
Beyer, Hugh and Karen Holtzblatt
1999   "Contextual Design." *Interactions* 6.1: 32-42.

Cooper, Alan
2004   The Inmates are Running the Asylum: Why High-Tech Products Drive us Crazy and How to Restore the Sanity" Sams Publishing.

Gaver, Bill, Tony Dunne and Elena Pacenti
1999   "Design: Cultural Probes" *Interactions* 6.1:21-29.

SIAMACK SALARI
EverydayLives Intl, Ltd

The purpose of this resource is to expose, breakdown and reconstruct ethnographic research or commercial anthropology for those who want to understand it better and use it more effectively.

One of the biggest challenges facing both ethnographers and users of ethnography is the confusing array of techniques and methodologies being offered; some of which are essentially traditional qualitative research carried out with video cameras.

Whilst there is no right and wrong approach, there is a need to separate out ethnographic research from traditional qualitative research to help better manage user expectations, deliverables and outcomes.

Serving as a forum for all those who have an interest in ethnographic research, Ethnosnacker aims to stimulate debate, experience sharing and case study deconstruction to try and harmonise the delivery of this technique. We have already started posting interviews, blogs and requests. And within a week of launching the channel, over 40 users and practitioners have joined our group.

CONTRIBUTORS

Glen J. Anderson (*glen.j.anderson at intel.com*) is a manager and user experience researcher at Intel Corporation. He received his Ph.D. in Human Factors Psychology from the University of South Dakota in 1993. His interests include applied-research methodologies, mobile computing, help systems, and intellectual property issues around user-oriented technology. Prior to joining Intel, he worked at IBM and Gateway, Inc.

ken anderson (*ken.anderson@intel.com*) is at Intel Research where he conducts ethnographic research of human cultures and social practices to inform corporate strategy and technology development. His specialties are in globalization, identity, and urban studies. His current work focuses on mobilities, time, and transnationals in and between urban environments.

Luis Arnal (*luisarnal@insitum.com*) is Founder and President of in/situm, an innovation consulting firm with offices in Chicago, Mexico City and Sao Paulo, where he oversees innovation management projects for corporations in a variety of industries: healthcare, automotive, consumer goods, technology, telecom and finance.

Mark Asboe (*asboe@mci.sdu.dk*) is PhD researcher at the SPIRE center, University of Southern Denmark. He holds a BA. in Anthropology and Organizational studies from the University of Århus and a M.Sc. in IT Product Design from the University of Southern Denmark. His research interest is Participatory Innovation in Small-to-Medium sized Enterprises (SMEs).

Ashwini Asokan (*ashwini.asokan@intel.com*)

Jonathan Bean is a spatial ethnographic research and design consultant in the San Francisco Bay Area, and PhD student at UC Berkeley's Department of Architecture.

Russell Beauregard (*Russell.beauregard@intel.com*) is currently leading a user experience quality assessment program at Intel. He received his M.S. and Ph.D. degrees in Human

Factors and Industrial Psychology from Wright State University, where he also taught research methods courses.

Simon Blyth, PhD (*sblyth@ideo.com*) is a Practice Lead at IDEO London, in Consumer Experience Design. Having completed his PhD, Simon began his career in academia before moving to Unilever. Particular interests of Simon include material culture, the sociology of consumption, science and technology studies and their relevance for innovation.

Jeanette Blomberg (*jblomberg@almaden.ibm.com*) manages the interdisciplinary Service Practices group at the IBM Almaden Research Center. Her research has explored issues in social aspects of technology production and use, ethnographically-informed organizational interventions, participatory design, case-based prototyping, and service innovation. Jeanette received her Ph.D. in Anthropology from the University of California, Davis where she was a lecturer in cultural anthropology and sociolinguistics.

Eva Brandt PhD (*eva.brandt@dkds.dk*) is an associate professor at Danish Center for Design Research / Danmarks Designskole.

Mikkel Brok-Kristensen – (*MBK@redassociates.dk*) is a manager at ReD Associates.

Leah Buley (*leah@adaptivepath.com*) is an experience designer for Adaptive Path. She is interested in how user experience design helps businesses make better decisions. She has worked with organizations in a variety of industries, including financial, legal, telecom, and non-profit. Leah has a Master's degree in Library and Information Science from San Jose State University and Bachelor's in American Studies from Barnard College. She is a member of the American Society for Information Science and Technology and the Information Architecture Institute.

Jacob Buur (*buur@mci.sdu.dk***)** As research director of the new SPIRE centre in Sønderborg, Jacob strives to develop a theory of 'Participatory Innovation'. Before joining the Mads Clausen Institute in 2000, he established and managed the User Centred Design Group of the Danish manufacturer Danfoss for ten years.

Melissa Cefkin (*mcefkin@us.ibm.com*: PhD Anthropology, Rice University) is a researcher in a group in IBM Research dedicated to research on services, service interactions and service design.

Michele F. Chang (*mfc@redassociates.dk*) is a Senior Consultant, ReD Associates, Copenhagen. Her research interests are convergence of mobile technologies in public spaces and the critical relationship between research and design. She has a Masters of Interactive Telecommunications from New York University's Tisch School of the Arts

Jessica Charlesworth (*contact@jessicacharlesworth.com*) is a designer who creates new methodologies of design in order to explore the rich interaction between people and the future implications of technology. She holds an MA degree in Design Interactions from the Royal College of Art and works as a freelance designer and researcher in service design, interaction design and design strategy. She is currently involved in various design strategy and research projects at Sense Worldwide (www.senseworldwide.com) in London.

Elizabeth Churchill (*churchill@acm.org*) is a Principal Research Scientist at Yahoo! Research, where she manages the Internet Experiences research group. Her research focuses on people's interactions with personal and public social technologies.

Brendon Clark is a Design Researcher, Mads Clausen Institute, University of Southern Denmark.

Martha Cotton is Associate Partner and research lead at gravitytank, an Innovation Consultancy. Martha has been an ethnographer in industry for over ten years and has worked across product, technology, brand and innovation strategies.

Meg Cramer (*meg.cramer@intel.com*) is a user experience researcher at Intel, specializing in uses of video in research. She has training in sociology and radio/television/film studies from Northwestern University.

Anne Line Dalsgaard (*a.l.dalsgaard@hum.au.dk*) is associate professor of anthropology at Aarhus University, where her research interests include youth, work organizations and international health.

Asaf Darr (*adarr@univ.haifa. ac.il*) is a senior lecturer in organizational studies in the Faculty of Sociology and Anthropology at the University of Haifa. He received his PhD in organizational studies from Cornell University.

Sophie Date (*sophie@fitassociates.com*) is currently enrolled at the University of Toronto studying Anthropology and Urban Studies. Presently, she is a gap year to study abroad. This fall, she is traveling to Honduras to do community work. In the spring of 2009, she will spend a semester in Tanzania working on HIV/AIDS education with local organizations.

Rogério de Paula (*rogerio.depaula@intel.com*)is a research scientist working for the Emerging Market Platform Group at Intel, Brazil. He conducts ethnographic research of everyday practices and life of low-income people to help design new technological products. His specialties are in design ethnography. His current work focuses on new literacies and new media in education and the economics and politics of technology in the developing world.

Contributors

Rebecca Denson (*rsdenson@gmail.com*) is a user experience designer. She has a Masters in IT Product Design from the Mads Clausen Institute of Product Innovation, where she studied user centered design and interaction design. Rebecca has done user research in Denmark, the Netherlands, India and Australia.

Jared Donovan (*jared@mci.sdu.dk*) is a post doctoral researcher in user centred design at the SPIRE Research Centre at the Universtity of Southern Denmark. His PhD was undertaken at The University of Queensland, Australia. He has a background in Illustration and Information Technology.

Susan Dybbs (*susan@rii.ricoh.com*) is a User Experience Designer and Researcher for Ricoh Innovations. She has a Masters of Interaction Design from Carnegie Mellon University. Prior to joining Ricoh, she worked as an interaction designer at Microsoft and Bank of America.

Ric Edinberg is a pragmatic dreamer who blends experiences in design research and planning with a fine art sensibility. He holds a masters degree from the Institute of Design in Human Centered Product Design and a Bachelors Of Fine Arts Degree in Sculpture from the Art Institute of Chicago. These experiences enable him to forge a synthetic, pragmatic approach to develop tools and systems that people can relate to and use, while adding economic value to his clients' businesses. Working alone and on many cross functional teams, Ric collaborates with consultancies and fortune 500 companies who need to re-think the familiar, and make meaning of the world into grounded, blue sky innovation. Recent projects have included communication strategies, devices, services, systems, and new business strategies in the food services, consumer electronics, e-commerce, software development, benchmarking and redesign, health care, workplace design and master planning for higher education campus vision.

Vanessa Empinotti is a research associate at Human Evolution Studies Laboratory – University of São Paulo (USP), Brazil- where she focuses her research on the political ecology of water and soil management, gender and development in Latin America. She also works as a research consultant.

Jason Eng (*jason@jasoneng.com*) is owner and manager of Ceylon Road PL, a videography company based in Singapore. His M.A. in French Literature from Middlebury College in Paris is based on structural analysis of folk tales in French film. Working evenings as a cameraman, he spent ten years in New York City as an IT consultant. In 2004 he relocated to Singapore. He films and edits independent video projects in China and all of Southeast Asia. Jason is the videographer for RacingThePlanet's 4Desert series, an exclusive endurance event that traverses the world's deserts (http://www.jasoneng.com/1.php).

Ingrid Erickson (*ierick@stanford.edu*) is a doctoral candidate at the Center for Work, Technology and Organization at Stanford University. Her dissertation looks at emerging

forms of 'socio-locative' practice. She holds an MS in information studies from the University of Michigan, an MA in religious studies from University of Chicago, and a BA in religion from Carleton College.

Antonella Fabri (*antfabri@aol.com*) is a New York-based independent consultant who holds a Ph.D. from the State University of New York, Albany. Her dissertation analyzed the political and cultural conflicts in Guatemala during the civil war. She earned her undergraduate degree in the combined fields of Anthropology and Literature from the University of Rome, Italy. She has taught in several colleges and conducted research in the field of public health in New York's Latino inner-city neighborhoods. In recent years, she has expanded her practice to include consumer research.

Susan Faulkner (*susan.a.faulkner@intel.com*) is a Research Scientist and Video Ethnographer in Intel's Digital Home Group. She holds an MA in documentary film and video production from Stanford University and a BA in comparative literature from Brown University. She began working as a video ethnographer at Interval Research Corporation in 1993.

Donna K. Flynn (*dflynn@microsoft.com*) leads the User Experience Strategy & Research team for Microsoft's Mobile Communications Business. Over the past 12 years she has led strategic research on a wide range of business and consumer users, specializing in international ethnographic approaches. Since receiving her PhD in Anthropology from Northwestern University in 1997, Donna has worked across diverse applied contexts, including international development, business consulting, technology and product design.

Tetsuhisa Fujii - Design Supervisor and Management Supervisor, Hakuhodo Inc. He has been a pioneering designer and strategist in non mass-media marketing praxis in Japan. Earned B.A. (Philosophy) from Univ. of Tokyo in 1999. He is a MBA candidate of HEC Paris, class of 2010.

Subhashini Ganapathy (*subhashini.ganapathy@intel.com*) is a user experience researcher at Intel Corporation. She joined Intel in 2006 and is currently working on understanding the experience of Digital Office platform and augmented reality. Subhashini received her Ph.D. in Human factors engineering from Wright State University, Dayton OH. Her research interests include modeling human interactions on complex systems, decision making, information protection, model-based information technology systems.

Christina Garsten is Professor and Chair at the Department of Social Anthropology, Stockholm University, and Research Director at Score (Stockholm University and Stockholm School of Economics). Her research interests are in the anthropology of organizations and markets, processes of globalization and emerging forms of regulation and accountability in the labour market and in transnational trade. She is a board member of the largest research funding agency in Sweden, The Bank of Sweden Tercentenary Foundation, and Chair of the

Gunnar Myrdahl Committee at Stockholm University. She is board member of Society for Economic Anthropology, USA. She is member of the editorial committee of the journals *Organization*, *Scandinavian Journal of Management,* and *American Anthropologist.* She has been visiting scholar at London School of Economics, Ecole des Hautes Etudies en Sciences Sociale, Stanford University, Swedish Collegium for Advanced Studies in the Social Sciences, European University Institute, Cambridge University, and Leeds University.

Hanne Cecilie Geirbo is a Senior Research Scientist at Telenor Research and Innovation, Norway. Her core competence is on financially constrained user segments, user experience in South Asian markets, and diaspora.

Julia Gluesing (*j.gluesing@wayne.edu;* PhD Anthropology. Wayne State University) is a research professor in Industrial and Manufacturing Engineering at Wayne State University whose research and teaching is dedicated to collaboration processes in global work and the role of IT technologies in work process.

Elizabeth Goodman (*egoodman@ischool.berkeley.edu*) is a PhD student at the University of California, Berkeley's School of Information. Previously, she was a design researcher at Intel's User Centered Design Group.

Laura Granka (*granka@google.com*) is a user experience researcher with Google in Mountain View, California. Her research centers on Google's search products and the information seeking process. Laura is completing her PhD at Stanford University.

Mike Griffin (*mgriffin@rii.ricoh.com*) is UX Manager in the Advanced Business Center of Ricoh Innovations (RII). He has an MA in Learning, Design and Technology from Stanford University. Prior to joining RII, he worked as a designer and researcher at SRI and the Institute for Research on Learning.

Maritza Guaderrama is the research manager at dnx. She has PhD in Information and Communication Sciences from the "Universidad Complutense de Madrid". She has conducted design research since 2002 applying and developing qualitative research methodologies in the user experience and innovation fieldworks.

Elizabeth Holloway (*eholloway@phd.antioch.edu*)teaches at Antioch University in the graduate Leadership and Change Program. Her current writing is in the areas of mentoring and coaching as relevant to creating communities of practice in corporate environments. In addition, she is investigating the systemic effects of "toxic" behaviors within organizational cultures and the role of coaching in these situations.

Joachim Halse (*Joachim@itu.dk*) is currently assistant professor at the Danish Design School in Copenhagen.

Natalie Hanson (*nataliehanson@mac.com*) manages a team of technologists and user experience professionals in SAP's Global Business Operations group. Her research interests include the ways in which consumer and market discourse continue to penetrate every aspect of U.S. life. Natalie has been at SAP for the past ten years, and she completed her PhD in Anthropology in 2004.

Jay Hasbrouck, PhD (*jhasbrouck@ideo.com*) is a Senior Human Factors Specialist at IDEO. His interests include sustainability and the role of technology, social networks, visual culture, space, place, and cultural landscape. He holds a PhD in Social Anthropology and an MA in Visual Anthropology, both from the University of Southern California.

Bettina Hauge is a PhD Scholar at the Department of Sociology University of Copenhagen and Business Economist, Copenhagen Business School,; she earned her MA in Anthropology, University of Copenhagen .

Jakob Høgel (*jakobh@dfi.dk*) is the Artistic Director of New Danish Screen at the Danish Film Institute. He grants development and production support to new talents in film and computer games. He has an MA in visual anthropology and has been visiting lecturer at Granada Centre for Visual Anthropology, University of Manchester, UK.

Hironori Iwasaki is a researcher at Hakuhodo's Innovations Lab and a brand specialist. Hironori is currently focusing on the integration of brand and human-centered design approaches. Hironori earned an M.A. (Media and Governance) from Keio University in 2001 and a B.A. (Liberal Arts) from International Christian University in 1999.

Anab Jain (*www.anab.in*) is a designer, filmmaker and researcher currently consulting at Nokia Design, London. The work she is presenting at the EPIC Artifacts session is part of a larger project done during her 18-month stay at Microsoft Research, Cambridge. Originally from India, she has a MA in Interaction Design from the Royal College of Art, London. Her work has received international awards including the UNESCO Digital Arts Award, Design for our Future Selves Award and Award of Excellence, ICSID and DuPont Inc.

Marianne Jensen is a Senior Research Scientist at Telenor Research and Innovation, Norway. She specializes on user research in ICT, user understanding, low income youth, mobile and social media.

Beth Johnson is an Envisioner at Continuum with a BFA in Industrial Design from the Savannah College of Art and Design. Her passion for understanding why people do the things they do helps her design user experiences and tell sassy stories. She interested in information design, immersion, and understanding emerging markets.

Kristin Johnson is an Envisioner at Continuum. Her passion lies in social entrepreneurship and developing countries. She co-founded the non-profit Practical Small

Projects that is bringing solar technology to villages in Mali, Africa. She has a particular interest in new working models and processes.

Brigitte Jordan (*jordan@akamail.com*) has carried out ethnographic research for more than 30 years in academic and corporate settings. Now a free-lance consultant, she holds the position of Consulting Principal Scientist at the Palo Alto Research Center. Many of her publications can be found at her website at www.lifescapes.org.

Olga Khroustaleva (*okhroust@google.com*) is a User Experience Researcher at Google in California where she works on Google Maps and Google Earth. She has a Masters degree in Human-Computer Interaction from the School of Information at the University of Michigan.

Lucy Kimbell (*lucy.kimbell@sbs.ox.ac.uk*) works as an artist and interaction designer. Her recent work disturbs evaluation cultures in management, technology and the arts. Before joining the faculty at Said Business School at the University of Oxford, Lucy was an Arts and Humanities Research Council creative and performing arts research fellow at the Ruskin School of Drawing and Fine Art and a tutor on the MA Interaction Design at the Royal College of Art, London. Lucy has over 10 years experience as a technology innovation consultant and design manager and previously worked as a BBC radio journalist. In 1996 she co-founded and was until 1999 a director of the art and digital design practice Soda.

Lisa Kreeger (*lkreeger@us.ibm.com*) is a member of the Service Practices group of IBM's Almaden Services Research. Lisa's research focuses on interorganizational relationships and relational work in complex service systems. Since joining IBM Research she has led or participated in projects focused on relationship formation among IT service providers, and collaboration practices among globally distributed teams. She holds a PhD from Antioch University and an MBA from Seattle University.

Aya Kubosumi (*aya.kubosumi@konicaminolta.jp*) is a human factor researcher with Konica Minolta Technology Center (Konica Minolta) and a second-year master's degree student at the Graduate School of Interdisciplinary Information Studies, the University of Tokyo. Her interests are research and studies on social and psychological impacts of communication and information technologies. She has conducted some ethnographic research on working-styles, workspaces and corporate culture.

Patrick Larvie (*patrickl@google.com*) is the manager of Google's user experience research team, and has led the global expansions of Google's research efforts. Prior to Google, Patrick worked in the International Design group at Yahoo!

Tobias Lau (*tobias@socialaction.dk*) is an ethnographer and founding partner of Social Action. He has studied at the Institute without Boundaries in Toronto and worked at Bruce

Mau Design where he was part the book, exhibition and movement, Massive Change about sustainable and strategic design solutions. He started Social Action in 2007 because he couldn't find a firm that would give him a job that focused on corporate social innovation, design, and new solutions that can build a better world. Social Action has now 5 employees and work with national and global companies, such as LEGO, Samsung and the Danish Recycling Company.

Matthew Lipson (*matthew.lipson@orange-ftgroup.com*) is a design researcher with Orange / France Telecom.

Tracey Lovejoy (*traceylo@microsoft.com*) is an ethnographer and user experience lead who has worked at Microsoft since 2001. Her projects have been wide in range, from baby boomers to teens to enterprise organizations across North America, Europe, Asia and South America. Tracey is the co-founder of the Ethnographic Praxis in Industry Conference, which brings together people who are actively thinking about the theoretical and methodological development of ethnography in industry. She received her B.A. in International Relations from UCLA and her M.A. in Social Science from the University of Chicago.

Peter Lutz (*peter.lutz@philips.com*) is an anthropologist and Marie Curie Research Fellow in the User Experience Group, Philips Research Europe. His current research explores ageing care and implications for socially appropriate technology.

Wendy March (*wendy.march@intel.com*) is a Senior Researcher within Intel Research. As an interaction designer Wendy is particularly interested in translating her ethnographic research findings into new concepts and future scenarios. Since joining Intel her work has included both design and ethnographic research in the US, Europe and Asia.

Nicolai Marquardt (nicolai.marquardt@ucalgary.ca) is a PhD student at the University of Calgary (Canada), and has a MSc in Media Systems from the Bauhaus-University Weimar (Germany). At these universities, as well as during research internships at Microsoft Research Cambridge (UK), he is working on research projects in the area of physical and tangible user interfaces.

Nathaniel Martin (*Nathaniel.Martin@Xerox.com)* is a research ethnographer in the Xerox Innovation Group. He has worked in Artificial Intelligence research and as a Computer Architect. His ethnographic work includes studies of authoring and publishing, scanning workflows and support engineers. Currently he is studying workflows in healthcare.

Simona Maschi, PhD (*s.maschi@ciid.dk*)is Director and Co-founder of Copenhagen Institute of Interaction Design and an expert in Service Design, Scenario Design, and Design Methods. She is interested in novel design solutions that support companies towards environmental and social responsibility. She was Associate Professor and Researcher at

Interaction Design Institute Ivrea (2002-2006) and Researcher at the Polytechnic University in Milan (1996-2002).

Tuuli Mattelmäki, DA, (*tuuli.Mattelmaki@taik.fi*) works as Design Connections doctoral school coordinator at the University of Art and Design Helsinki.

Tracy L. Meerwarth (*tlm@consbrgs.com*) is a cultural anthropologist on contract working at General Motors Research and Development (GM R&D). Her research focuses on understanding organizational issues pertaining to GM's organizational partnerships with suppliers and R&D partners. Her current work includes research into understanding GM's automotive plant culture and building cognitive models that support collaboration.

Jay Melican, PhD (*jay.melican@intel.com*) is a Research Scientist and Design Researcher in Intel's Digital Home Group. His recent research has focused on technologies that facilitate residential energy management; issues of image, identity, and privacy surrounding social networking and media personalization; and the communities of interest that grow up around user-generated content.

Christine Miller (Savannah College of Art and Design) Chris is a professor of Design Management at SCAD. Her doctoral research explored the role of culture in mediating the relationship between formalization and innovation within the product development division of a Tier One automotive supplier. Her research interests include how sociality and culture influence innovation and the design of new products and technologies.

Dennis Nordstrøm (*nordst@gmail.com*) is a freelance design researcher currently situated in Sydney. He has a M.Sc. in IT Product Design from the Mads Clausen Institute of Product Innovation, where he studied how ethnographic research informs design. He has done design research in the United States, Australia, and Denmark.

Katja Øder Hansen – is a Design Anthropologist at the Danish Design Company 1508 A/S

Noriko Ohara is an ethnographic researcher with Konica Minolta, Imaging Research Culture Institute. Her research fields are working-styles, work spaces and organizations, aiming at creating new solution concepts.

Elin Rønby Pedersen (*elinp@google.com*) is a Research Scientist with Google, applying user-informed prototyping to devise ways to make better use of information derived from user interaction - for activity based interaction, distraction management, memory help and diagnostics. Prior to Google, her research focused on topics such as pen and gesture interaction in ubiquitous computing, work and home-based media spaces, peripheral awareness and social interaction to facilitate communication, paper interfaces and new user interaction paradigms for information workers and for developers.

Wanda Pratt (*wpratt@u.washington.edu*) is an Associate Professor the Information School and the Division of Biomedical & Health Informatics in the Medical School at the University of Washington.

Simon Pulman-Jones (*simon.pulman-jones@gfk.com*) is the European Director for GFK-NOP World Observational and Ethnographic Practice

Richard Radka (*www.thenodecompany.com*) Partner, Node - Rich leads teams of ethnographers, strategists, and designers to identify business opportunities and to create new products and services that meet the spoken and unspoken needs of consumers within these opportunity areas.

Lisa Reichenbach (*lreichenbach@in-sync.bz*) is the Director of Applied Research at in-sync, a Toronto based marketing consultancy that combines innovative research methods, inspired strategic thinking and proven processes to help top tier marketers in global firms find and exploit brand opportunities. She holds a doctorate in Anthropology from Oxford University.

Jens Riegelsberger (*jensr@google.com*) Jens Riegelsberger is a Senior User Experience researcher at Google in London where he works on mobile product development and coordinates user research in Europe, Middle East, and Africa. He holds a PhD in Human-Computer Interaction from University College London. Prior to Google Jens was a Guest Professor at the University of the Arts Berlin and has conducted research projects for Amazon and Microsoft Research, among others.

Brian Rink a senior member of IDEO's Transformation Practice, which helps companies apply human-centered design to achieve internal innovation and growth. In recent years, Brian has led ethnographic research engagements at QVC, Fuji Xerox and other Fortune 1000 companies and has explored storytelling as a tool for organizational change. At EPIC 2006, Brian co-led a workshop entitled, "Deep Impact: Creating Strategies for "Meaning-ness" in Research Deliverables."

Simon Roberts (*Simon.w.roberts@intel.com*) leads the social science and design team for Intel Digital Health in Europe. He is the principal investigator on Intel's Global Aging Experience study and on the ethnography strand within the TRIL Centre.

Alie Rose (*a.rose@ciid.dk*) is a project manager at the Copenhagen Institute of Interaction Design. Originally from a concept design background, Alie has worked on a portfolio of projects covering innovation, interaction design, marketing, and business & technology research. Before moving to Denmark to work at the Copenhagen Institute of Interaction Design, Alie was a project manager at the Interaction Design Institute Ivrea (Italy) where she was responsible for managing Applied Dreams (client facing innovation workshops), exhibitions and communications.

Kate Rutter *(kate@adaptivepath.com)* is an Experience Designer at Adaptive Path. During her thirteen years in the web industry, she's honed her talent for bringing companies and customers closer together through smart strategies and inventive design. Kate holds a Bachelor of Arts in studio art from Wellesley College, and is a member of the American Society for Information Science and Technology, the Information Architecture Institute and the Interaction Design Association.

Siamack Salari (*siamack@everydaylives.com*) is the founder and head of thinking at London-based EverydayLives International. Earlier in his career, he was the resident expert-host on Channel 4's "Shop Til You Drop" and the BBC Money programme's, "Shoppers in the wild". He began his working life as an industrial designer but then shifted his focus to better understand consumer change across Europe. Today he is a populariser and spokesperson for commercial and video ethnography around the world.

Tony Salvador (*tony.salvador@intel.com*) directs product definition and development research for the Emerging Markets Platforms Group (EMPG) at Intel. Before being demoted to management, he was a Research Scientist and co-founder of Intel's People & Practices Group.

Johann W. Sarmiento-Klapper (*jsarmi@gmail.com*) is a member of the user experience team at SAP Global Business Operations group and a doctoral candidate in Human-Computer Interaction at Drexel University. His research interests involve the study of collective work practices and the ways that socio-technical systems are designed, implemented, and evaluated.

Mayank Sharma (*mayank.sharma@intel.com*) works in Intel's People and Practices Research Group.

John W. Sherry (*john.sherry@intel.com*) joined Intel Corporation in 1996 as a founding member of what was to become the People and Practices Research Group. In 2005 he joined Intel's Digital Health organization as director of the social science research group.

Lillian Shieh (*www.nestnyc.com*) Founder, Nest - Lillian uses ethnographic methods to learn about people's experiences, and transforms insights about how we live into designs and strategy for better products, categories, environments, and services.

Larisa Sitorus (*larisa@mci.sdu.dk***)** is currently completing her PhD thesis at the University of Southern Denmark on configuration based on field studies of refrigeration mechanics, who deal with setting up and repairing refrigeration systems in supermarkets. She has a background in Anthropology, Economics and Design.

Keren Solomon (*keren_solomon@intuit.com*) is a senior ethnographer at Intuit, a U.S.-based software company that is the leading provider of financial software and web-based services

for consumers, small businesses and accounting professionals. She has a BA from the University of Pennsylvania and a MA in International Relations from Yale University. Prior to joining Intuit, Keren worked at Cheskin, Envirosell, and as an independent research consultant. She has conducted research related to technology and consumer products for U.S. and global companies.

Patricia Sunderland (*psunderland@practicagroup.com*) is an anthropologist and a founding partner of Practica Group. She brings background and interest in linguistic as well as visual anthropology to her specialty in the ethnographic, cultural analysis of consumer environments. Patti has been melding ethnographic video and photographs with cultural analysis to bring consumer environments to life for clients such as Advanta, Anheuser-Busch, General Motors, Hallmark, Intel, JCPenney, Nissan, SC Johnson, Target and Tropicana for more than a decade.

Hiroshi Tamura Research Director at Hakuhodo's Innovations Lab. Hiroshi has experienced ethnographic praxis for years as a cognitive scientist, and has led projects with Fujitsu, Kao, and other enterprises in the areas of product and service development and corporate communications. At EPIC 2007, Hiroshi presented a paper entitled "Harmonizing Human Eyes with Digital Sensors." Hiroshi earned an M.S. (Informatics) from Univ. of Tokyo in 2002, and a B.A. (Cognitive Psychology) from Univ. of Tokyo in 1994.

Kaoru Tanaka is a consultant at Hakuhodo's Innovation Lab and a brand specialist. Kaoru has closely worked with IDEO as part of a joint task force that specializes in innovation design for Japanese clients. He has extensive experience conducting ethnographic research in collaboration with IDEO.

Alex Taylor is a member of the Socio-Digital Systems Group at Microsoft Research, Cambridge (UK). He has undertaken investigations into a range of routine and often mundane aspects of everyday life. For instance, he's had an unhealthy preoccupation with hoarding, dirt, clutter and similar seemingly banal subject matter.

Scott Ternovits is a founding Partner and design lead at gravitytank, an Innovation Consultancy. He has over fifteen years experience leading design programs for innovation leaders.

Inga Treitler (inga.treitler@gmail.com) is a cultural anthropologist who studied performance, politics and popular culture in the Caribbean and wrote a PhD dissertation at University of Illinois called "Politics is a Masquerade." She worked for many years as an environmental researcher and analyst with Oak Ridge National Laboratory, and then as researcher and innovator at the strategic design firm Doblin Group, and now she writes for and consults with numerous companies around the world doing consumer research in a freelance capacity.

Contributors

Elizabeth (Dori) Tunstall (*etunst.uic.edu*) is Associate Professor of Design Anthropology at University of Illinois at Chicago. She has worked as a user experience planner for Arc Worldwide and Sapient and as managing director of AIGA's Design for Democracy. Beyond her teaching and scholarship, Dori consults with Motorola and the U.S. IRS.

Kenton T. Unruh (*ktunruh@u.washington.edu*)is a Senior Fellow in the Division of Biomedical & Health Informatics in the Medical School at the University of Washington.

Mads Vedel Jensen (*mads@mcis.sdu.dk*) is an interaction designer in the SPIRE Research Centre. He has a PhD in interaction design from the Mads Clausen Institute, University of Southern Denmark. He has a background in pottery, pedagogics, and industrial design.

Nina Wakeford (*wakeford@gmail.com*) is Director of the Incubator for Critical Inquiry into Technology and Ethnography (INCITE) and on the faculty of the Department of Sociology at the University of Surrey, UK. The aim of INCITE is to provide a creative interdisciplinary space for research projects which explore the socio-cultural dimensions of technology use and design. Nina's previous work in the sociology of new technologies includes a study of an all-female mailing list, research on internet cafes, and numerous collaborative projects with companies such as Sapient, FX Palo Alto and Intel.

Roxana Wales (*rwales@google.com*) is a social anthropologist on the Google research staff with an interest in intelligent computing systems. Before joining Google, she was on the staff of the NASA Ames Research Center.

Patricia Wall (*wall@xerox.com*) is a Research Ethnographer and Manager of the Work Practice & Technology Area in the Xerox Innovation Group. She has been applying ethnographic-based methods in research, product design and services contexts in Xerox. She is currently exploring work practices in office and healthcare environments to inform new technology and solutions development.

Magda Wesolkowska (*mwesolkowska@gmail.com*) is an applied anthropologist and design strategist at Anthropology in Design (AiD), a social innovation strategy consultancy she founded, focused on addressing social and business challenges for a variety of clients in the corporate and the non-profit sector. Prior to this she worked as an associate strategist for in-sync, a globally recognized marketing consultancy based in Toronto. As well she has taught at Concordia University and University of Montreal design schools, and led several community-based ethnographic projects focused on designing for wellbeing.

Bo Wesley (*BOWE@novonordisk.com*) is a senior adviser of Future Planning and Social Innovation Projects - Corporate Branding & Responsibility, Novo Nordisk.

Sarah Wilner, MBA (*swilner06@schulich.yorku.ca*)is a doctoral candidate in Marketing at York University. She completed a degree in anthropology before the ascendance of

corporate ethnography (a profession she would have pursued given the opportunity). Her research examines the construction of an imagined consumer through ethnography and the product designs that result.

Michael Winnick (*michael.winnick@gravitytank.com*) is managing director at Chicago-based gravitytank. He received his training from the Illinois Institute of Technology's Institute of Design and Stanford University.

Christina Worsing is a design researcher at IDEO. She has her Master's Degree in Communication Planning and Information Design from Carnegie Mellon University. Prior to her design life, Christina was a practicing artist and heavily involved in community development projects. Her work in all disciplines has focused heavily on understanding context with the hope of supporting people create a sense of place for themselves.

Matthew Yapchaian (*yapchaian@gmail.com*) works with Intel's People and Practices research group, doing research in media-based communication, social media, and cinematic narrative. He has an MFA in new media Studies from the University of Illinois.

Jo Yung (*joyung@paceth.com***) (M.A. Anthropology, Chinese University of Hong Kong) is experienced in social sector policy and consumer research in Hong Kong, Mainland China and the U.S. She specializes in women's studies, consumption and identity and research methodology. She is the Vice-President for Pacific Ethnography, China Operations. She is based in Beijing and Hong Kong.

Alex Zafiroglu (*alexandra.c.zafiroglu@intel.com*) is an anthropologist in Intel Corporation's User Experience Group within its Digital Home Division.. She has PhD in Cultural Anthropology from Brown University.

Grace Zamora-Roldan is a Senior Research Scientist at Telenor Research and Innovation Center Asia Pacific, Malaysia (TRICAP). Her expertise is on public-private sector partnership, governance and ICT, and customer insight in Asian growth markets.

PARTICIPANTS

Rikke Aarhus
Gabrielle Ackroyd
Diana Africano Clark
Katerina Ailova
Anthony Alvarez
Tanja Belinda Andersen
Tariq Osman Andersen
Rasmus Anderskouv
Glen Anderson
ken anderson
Elizabeth Anderson-Kempe
Bettina Arevad
Luis Arnal
Mark Asboe
Ashwini Asokan

~

Pernille Bach
Martin Baere Pedersen
Gbolahan Bakare
Toke Barter
Henning Basballe
Valérie Bauwens
Jonathan Bean
Caroline Beck
Maria Bezaitis
Cristina Bilsland
Thomas Binder
Martha Bird
Susanne Bisgaard
Tanja Bisgaard
Jeanette Blomberg
Simon Blyth
Anne Boegh Fangel
Francoise Bourdonnec
Eva Brandt
Zoe Bridges
Kajsa Brimdyr

Mikkel Brok-Kristensen
Louise Buch
Leah Buley
Jacob Buur

~

Melissa Cefkin
Gina Chacon
Michele Chang
Jessica Charlesworth
Todd Cherkasky
Mette Birkedahl Christensen
Tamara Christensen
Ellen Christiansen
Elizabeth Churchill
Brendon Clark
Melissa Cliver
Marc Coenders
Valeria Corna
Martha Cotton
Sylvain Cottong
Margaret Cramer
Johan Criel
Martine Curtin

~

Anja Dahl
Anne Line Dalsgaard
Claudia Damhuis
Asaf Darr
Sophia Date
Rogerio de Paula
Rita Denny
Rebecca Denson
Katleen Dethier
Josefine Due
Susan Dybbs

~

Ric Edinberg
Gitte Engelund
Christian Enyiukwu
Ingrid Erickson
Christian Eriksen
Sara Eriksén

~

Antonella Fabri
Pia Færløv Andersson
Susan Faulkner
Kim Fischer
Donna Flynn
Shannon Ford
Laura Forlano
Jodi Forlizzi
Maria Foverskov
Diane Fox-Hill
Lise Frandsen
Jacob Friis
Trine Fuglsang
Tetsuhisa Fujii

~

Christina Garsten
Marjan Geerts
Hanne Cecilie Geirbo
Gisela Gier
Julia Gluesing
Ezra Goldman
Li Gong
Steven Gowers
Mike Griffin
Hanne Groth
Tobias Grut

Maritza Guaderrama
Cristina Guembe Martinez
Wendy Gunn

~

Joachim Halse
Anne Vorre Hansen
Marie Louise Hansen
Natalie Hanson
Richard Harper
Jay Hasbrouck
Bettina Hauge
Torgny Heimler
Sophia Hill
Casper Hoegenhaven
Jakob Høgel
Sidsel Hougaard
Ole Hundstuen
Gordon Hush
Tina Brandt Husman

~

Mirona Iliescu
Maria Isohanni
Hironori Iwasaki

~

Chris Jackson
An Jacobs
Anab Jain
Bolette Jensen
Lisbeth Dons Jensen
Mads Vedel Jensen
Marianne Jensen
Julie Jenson Bennett
Birgit Jeppesen
Lene Jermiin
Steffen Jöhncke
Beth Johnson
Anil Joisher
Jennifer Jones
Rachel Jones
Gitte Jonsdatter
Brigitte Jordan
Karin Jørgensen
Anne Dorthe Josiassen

~

Maja Kecman
James Kelway
Magnus Kempe
Finn Kensing
Lucy Kimbell
Anna Kirah
Koji Kishimoto
Wakako Kitamura
Mette Kjaersgaard
Fabian Klenk
Louise Klinker
Line Knudsen
Louise Koch
Preetham Kolari
Gitte Kolt Rasmussen
Nalini Kotamraju
Liv Nyland Krause
Lisa Kreeger
Pawel Krzyworzeka
Aya Kubosumi
Vicky Kyris

~

Filip Lau
Tobias Lau
Ken Lauer
Kirsten Lauritsen
Jun Lee
Kathy Lee
Eevaliisa Lempinen
Leeor Levy
Leena Lie
Edward Liebow
Andreas Lloyd
Siff Lohse
Iria Lopez
Mazyar Lotfalian
Peter Lutz
Julie Lynge Andersen

~

Alexandra Mack
Christian Madsbjerg
Liza Makarov
Wendy March
Emanuela Marchetti

Nat Martin
Richard Martin
Simona Maschi
Humberto Matas
Tuuli Mattelmäki
Max Matus
Chad Maxwell
Lorna McDougall
Tracy Meerwarth
Jane Mejdahl
Jay Melican
Søren Merit
Martina Mettgenberg
Christine Miller
Andrea Moed
Jonas Moll
Anna Mollerup
Kazuya Monden
Cecily Morrison
Dave Müller
Kirsten Munk

~

J. Paul Neeley
Jaimes Nel
Claus Nielsen
Kasper Tang Nielsen
Lene Nielsen
Linda Lützau Nielsen
Jette Nøhr
Marianne Norden
Guldbrandsen
Dennis Nordstrøm
Susie Nyholm

~

Lionel Ochs
Noriko Ohara
Miki Ohta
Gertrud Øllgaard
Lone Olsen
Martin Ortlieb

~

Daniel Palomino
Trine Paludan
Tine Park

Participants

Malene Patsche Kjeldsen
Matt Pattison
Elin Pedersen
Jens Pedersen
Scott Pester
Kimberly Pierce
Simon Pulman-Jones

~

Rich Radka
Bas Raijmakers
Emanuele Rapetti
Paul Ratliff
Lisa Reichenbach
nicole Reinhold
Marc Rettig
Stephanie Richards
Jens Riegelsberger
R Brian Rink
Ken Riopelle
Norton Rizzato Lara
Simon Roberts
Thomas Robinson
Helena Roeber
Eva Elisabeth Roland
Maria Divina Gracia
Roldan
Valerie Romley
Charlotte Rønhof
Alie Rose
Ed Ross
Simon Rubens
Ellen Rutter

~

Frederikke Saabye
Siamak Salari
Liliana Salazar
Jukka Salmikuukka
Viola Samuelsen
Yvonne Sanders-Hamilton
Nallieli Santamaria
Johann Walter Sarmiento-
Klapper
Peter v. Savigny
Neha Sayed
Salil Sayed
Anne-Mette Scheibel

Jakob Weber Schjorring
Katja Øder Schlesinger
Cathrine Schmidt
Bari Schulman
Stine Schulze
Heinrich Schwarz
Lone Sehested Hundahl
Dawn Shaikh
John Sherry
Lillian Shieh
Aiko Shimizu
Hideaki Shirane
Mette Sillesen
Larisa Sitorus
Adrian Slobin
Keren Solomon
Astrid Sondergaard
Werner Sperschneider
Susan Squires
David Steed
Nelle Steele
Donna Sundbo
Patricia Sunderland
Laurel Swan
Lamees Sweis

~

Hiroshi Tamura
Kaoru Tanaka
Alex Tarling
Alex Taylor
Scott Ternovits
Karen Thommesen
Jacob Suhr Thomsen
Jane Thomsen
Anne Sofie Thorvardarson
Tom Togsverd
Kathryn Tomlinson
Karina Torlei
Inga Treitler
Christine Truc Modica
Mona Truelsen
Takaaki Tsuji
Elizabeth Tunstall

~

Taisuke Uehira
Takanori Ugai

Rikke Ulk
Kenton (Kent) Unruh

~

Eva Vangkilde
Bogo Vatovec
Rama Vennelakanti
Lene Vibjerg
Joan Vinyets
Karen Waltorp Vium
Nina Holm Vohnsen
Jakob Voldum

~

Linda Wagner
Nina Wakeford
Russell Ward
Kaare Holm Warming
Christina Wasson
Bo Wesley
Magda Wesolkowska
David Whittle
Sofie Widding
Sarah Wilner
Thea Boje Windfeldt
Michael Winnick
Malene Brandt Winther
Julie Christiane Thiesen
Winthereik
Christina Worsing

~

Matthew Yapchaian
Signe Louise Yndigegn
Duncan Young
Mike Youngblood
Jo Yung

~

Todd Zaki Warfel
Riem Zouzou

EPIC2008 SPONSORS

PLATINUM:

Dublin Enterprise and Construction Authority

Microsoft

GOLD:

IBM.

novo nordisk®

SILVER:

HAKUHODO

(intel)

Leerita Baadaes K

Microsoft®
Research

SPIRE

BRONZE:

1508

COPENHAGEN
LIVING
LAB

R&D*
RED ASSOCIATES

Pitney Bowes
Engineering the flow of communication

gravitytank

Snitker & Co.

Sapient®

Artemis
research by design

m.c.t.
marketing
communication
technologies

Dalphrsha

MIND
LAB

PacEth
anthropology & design

CPH DESIGN

People & Product

e-Types

ORGANIZATIONS:

A·M·E·R·I·C·A·N
ANTHROPOLOGICAL
ASSOCIATION

NAPA