TAKING CARE of BUSINESS

Having an impact and staying relevant as ethnographers in today's economic climate.

EPIC2009

Ethnographic Praxis in Industry Conference

conference proceedings | aug 30 – sep 02 | chicago, illinois usa

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.

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2200 Wilson Blvd, Suite 600 • Arlington, VA 22201
phone 703/528-1902; fax 703/528-3546
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Introduction to the EPIC 2009 Proceedings: The Fifth Annual Ethnographic Praxis in Industry Conference

The theme for EPIC 2009 is **Taking Care of Business: having an impact and staying relevant as ethnographers in today's economic climate.**

In many ways EPIC was created so we can collectively, as a community, meet annually to "take care" of what we do for a living. During the past four years at EPIC conferences, attendees have striven to "take care" of current and future praxes, instances and evidence of impact, our roles within various organizations, our connections to other communities, and importantly our connections to each other. In our fifth year, during a time of unprecedented global economic turmoil, we turn our attention to taking care of the state of our business.

In 2009 we come together in Chicago, a city known - for better and for worse - for "taking care of business" - for getting things done. In Chicago tensions both productive and counter-productive have fueled the city's progress, and we in the EPIC community likewise benefit from the energy generated by our inherent tensions (debates about who we are, where we come from, and our differing positionings with regard to industry). In 2009 our intent is to have these tensions, and our combined passion for what we do, be the groundwork for meaningful discussion about where we find ourselves now, and where we hope to go - as a community of people learning from the (in some ways improbable, remarkable, and paradoxical) encounter between the people, practices and interests of ethnography and the people, practices and interests of industry.

Taking care of BUSINESS

- The new opportunities, and the increased urgency, to justify and demonstrate the value, contribution, impact and relevance of our work as the world reviews its priorities in the wake of the global economic crisis
- How we contribute to lowering risk, driving innovation, increasing relevance, and maximizing return on investments

Taking CARE of business

- Our ability to re-frame business models and objectives in the post-crunch world, and in so doing restoring and reviving business
- Our ability to humanize business and make it sensitive to people and cultures
- How our work can enable us to learn from where business and commerce have gone wrong, and contribute to establishing more sustainable relationships between business and society

EPIC 2009 sees the current atmosphere of uncertainty and re-evaluation ushered in by the world economic upheaval as an exciting opportunity to look afresh at how we both contribute to and shape the ends and objectives of industry and business.

It is important to emphasize that the EPIC community has formed around a very broad and inclusive definition of "Industry", and our theme this year equally refers to "Business" in the broadest sense.

With a view to EPIC's next five years and beyond, EPIC 2009 included a number of "interruptions" to the formal proceedings throughout the conference. These interruptions allowed us to examine key themes for ethnographic research practitioners and discuss these issues, as a community, Town Hall style, with an eye to further continued communication beyond an annual conference. Importantly, this part of the conference was facilitated by our future leaders, those who are new to the EPIC community and new to the field. The content of these informal presentations and discussions are not included in this published proceedings, but their intent should live on in future EPICs.

In Thanks

We are particularly grateful to the attendees and presenters of EPIC 2009. It has been extremely encouraging that in this, the conference's fifth year, the thoughtfulness and relevance of submissions across all categories – papers, workshops and artifacts – continue to be very high – reflecting the growing maturity and strength of EPIC discourse, community and practice.

Our appreciation goes to an energetic team of local supporters, who contributed great ideas and tireless energy to the effort of making this conference happen.. This year we were invited to visit and discuss with a number of Chicago-based consultancies and design firms. We thank Conifer Research, Doblin, HLB, Razorfish and Sapient for opening their doors to us. We would also like to express our thanks to the 2009 EPIC program committee for their efforts in continuing to push at the boundaries of this emergent domain and for helping to facilitate a high quality and rewarding experience. The EPIC steering committee deserves a round of applause for its on-going support and guidance in making EPIC stronger each year. In addition, we'd like to thank all the reviewers for their tireless efforts in evaluating the submissions and providing feedback to authors.

We would like to acknowledge the generous support of our corporate and institutional sponsors, Microsoft Corporation, GfK, Hakuhodo, IBM Corporation, Intel Corporation, Artemis Research by Design, Daishinsha Inc., Marketing Communication Technologies, Flashpoint, gravitytank, iDSA Chicago; Institute of Design, Sapient, and the American Anthropological Association and the National Association for Practicing Anthropologists for their contributions of people and financial resources. Without their support during a year of particularly challenged budgets EPIC 2009 would not have occurred.

Finally, we would like to express our particular gratitude to Magnus Kempe of Artemis Research by Design and Suzanne Mattingly from the American Anthropological Association for their tireless efforts in keeping EPIC's website and administrative processes running smoothly, in this as in previous years.

Martha Cotton
EPIC 2009 Co-Organiser
Gravitytank

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EPIC 2009 Co-Organiser
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SIMON ROBERTS, CURATOR

Opening Keynote Address

Icebergs and ideologies; How information flows shaped the credit crisis (from the perspective of a journalist and anthropologist)

GILLIAN TETT
Financial Times

Three decades ago, Pierre Bourdieu pointed out that the way that elites maintain power in a society is not merely by controlling the means of production, but the cultural discourse - or cognitive map. And what matters most in that respect is not merely what is openly discussed, but what is not debated, since it is considered "boring", irrelevant, excessively complex - or simply ignored, or taken for granted.

The Western financial system has exemplified this pattern in recent years, with terrible consequences. In the decade before the financial crisis erupted, there was almost no media coverage - and no wider political debate - about the extraordinary revolution underway in the debt and derivatives world. This was in marked contrast to the extensive coverage of the equity market, and other parts of the corporate world. That partly reflected the cultural patterns of the Western media, in terms of what it defines as a "story." However, the pattern also suited the banking elite extremely well, since it ensured there was minimal external scrutiny and challenge of their activities - or of the dominant free-market ideology which was used to justify these banking practices.

However, this pattern came at a tremendous cost. Most notably, in a climate with minimal scrutiny and challenge, bankers and policy makers were unable to see the instabilities in their system, partly because they were trained to think and act in silos, without any appreciation of how the different parts of finance joined up. The fundamental principle that drives social anthropology - namely a holistic analytical approach which seeks to place ideologies and practices within a social context - was missing from the world view of bankers and policy makers, to terrible effect. Somehow that needs to be addressed in the future - and in that respect, the insights of anthropologists have much to offer.

Taking the driver's seat: sustaining critical enquiry while becoming a legitimate corporate decision-making

ROGERIO DEPAULA
Emerging Markets Platform Group, Intel Corporation

SUZANNE L. THOMAS
Emerging Markets Platform Group, Intel Corporation

XUEMING LANG
Emerging Markets Platform Group, Intel Corporation

Staying relevant (to the business) is at the heart of career-advancement and (increasingly) job-security, particularly, in a business unit. It embodies a number of different meanings to the different players in corporate—from supporting product definition to creating strategic plans to making the appropriate business decisions. Rather surprisingly, though, we find EPIC talking about it with a certain discomfort, particularly when it comes to affect our identities as social researchers. On the other hand, we, in the industry, have little choice but to "play the game" and find ways whereby we can best utilize our knowledge, experiences, skills, our unique perspective to endow us an edge—creating interesting possibilities to stay relevant. This paper investigates our own trajectories in the past few years in a product group at Intel where we suddenly found ourselves increasingly more involved with decision-making, taking actions that would ultimately affect the course of the business and our own careers. Unwittingly or not, this shift has become part of a strategy for negotiating relevance in ever changing business environments.

"…This close touch of the fantastic element of hope for transformative knowledge and the severe check and stimulus of sustained critical enquiry are jointly the ground of any believable claim to objectivity or rationality not riddled with breath-taking denials and repressions."
Donna J. Haraway

Introduction

To create meaningful products and services, we must do more than conduct ethnographic research that represents the fields of users and uses. We must change the processes by which such users and uses are defined and touched by corporations. This means going beyond research to play more powerful and extensive roles in business decision-making. It also means subjecting ourselves to the same critical enquiry we apply to the field. Without this extra step, we are simply translators, re-presenters, of "othered" realities. We would be simply "taking **care** of business" (traditional gender implications intended). In contrast, our goal is no less than to become a *legitimate* player, one able to change that business, to make its way of doing business more meaningful, not just its products and services. The legitimation of our business role is thus no less than our strategy for staying relevant in the corporate environment, shaping and being shaped by ever changing business demands, expectations, meanings, and needs.

Looking back through the rearview mirror and drawing on specific examples from our work, we (ethnographic researchers and practitioners) simultaneously see ourselves as what we once were in and for the corporate—exotic social researchers with barely legitimate work methods and obscure means of delivering our results—and what we are increasingly becoming—decision makers in the corporate business environment. No longer simply researchers, we are invited by our colleagues to contribute as product and business strategists, as dealmakers, and as corporate narrators. We have found ourselves in the driver's seat, so to speak, and frankly wondering how and when we got here.

This nagging sense of "misrecognition" (Althussser, 1970) is our saving grace. To believe in our transformation is to uncritically participate in the corporate sense-making project. Instead, we second Donna Haraway's call for sustained critical enquiry, the kind of self-reflexivity that plagues our profession, so that our corporate activities are noteworthy, and we can learn from them. We must make sense of the corporation and our actions within corporations so that we can maintain a heady hope for change and relevance, and a desire to transform not only products but also people and our institutions—making the interactions between these more relevant and more meaningful.

It is telling that we find ourselves now, in this specific historical moment, ensconced between the roles of trained critical ethnographers and business decision-makers. Business as usual no longer works—our relevance is no longer 'measured' by the quality (and number) of field-reports alone. As researchers (in fact, as *legitimate* researchers) we've been asked to act more, demonstrating more and more the *impact* of our work on the business. We are asked to perform according to the dominant corporate ethos, namely, shorter-term focus and oriented toward facilitating and supporting product success (i.e. sales volume and higher profit margins). We thus find ourselves in a somewhat difficult position, attempting to reconcile this dialectic (alas, often felt as schizophrenic) relationship between our interpretive take on everyday 'realities' (be they of our own business practices, 'markets' we set out to investigate, or society in general) and corporate understanding of these (by means of its naturalized notions of technology adoption, market developments, business goals, consumption, and the like). We have little hope to resolve that, instead as we look in the rearview mirror and reflect on the trajectory leading to this, we see ourselves carving new paths, engaging in different practices, and performing different identities. So, the question that plagues our career (and identity) as corporate ethnographers remains—as we increasingly demonstrate greater internal and external relevance of our work, what will be left of our inner revolutionary or at least dubious academic spirit?

In the following pages, we review our path from back seat ethnographer to driver's seat business and product strategist. Not surprising, we find the history of EPIC conferences and the hot button topics of the last few years as a litmus test for the changing roles and values of corporate ethnography. We note recurring themes pertaining to the relevance and impact of ethnographic practice in corporations alongside with debates of our identities as corporate researchers. We witness the gradual re-positioning and re-purposing of ethnographers as innovators and marketing experts. These rich exchanges of experiences demonstrate at least a struggle toward a better understanding of our roles, practices, values, and relevancies in and for the business and the research community at large, as we attempt to grow older. We then critically review our own progress at Intel, in particular, our beginnings as researchers to current roles spanning that of strategic planner, project/product manager, salespeople, product deployment specialists and beyond. In a quick review of these roles, we reveal that we are no longer merely 'informants' of outside 'realities' to inform design or business decisions, but increasingly are putting stakes in the ground and requiring our colleagues and managers to change, as we are asked to change as well.

Feminists have long called for women to move beyond the recognition of gender objectification to the strategic construction of actionable identities, be they Donna Haraway cyborgs or Audre Lord's sister outsider. The feminist objective is high – no less than social change. In this paper, we bare our emergent roles as corporate ethnographers (the reification of our work and its values) – our consciousness-raising project. We then also call for the less lofty goal of changing the lived landscapes of not only those we research but also those with whom we work.

FROM ETHNOGRAPHIC PRACTICE TO ETHNOGRAPHIC KNOWLEDGE

Over the last handful of years, we have witnessed a shift in how we, as ethnographers, are evaluated by those inside corporations. At the outset, our value was tied to our research practices, and so we struggled (and still struggle) to validate our research findings and translate them into actionable knowledge as well as to reconcile the critical purview of our own doings to corporate expectations toward our work "deliverables." Meanwhile, we also have been handed new responsibilities that reach far our value as practicing researchers. Indeed, more than research practitioners, we are increasingly valued for a unique and uniquely actionable knowledge of the world (spanning users to markets to businesses). Our disciplinary perspective on "the users[1]" (i.e. ordinary people) and their increased participation in markets gained currency in product, market and business strategy. As a result, our research peers and we are being "promoted" to strategic planners, business innovation leads, market strategists, and even general managers.

To track this arc of our corporate and consulting careers, we review the last few years of EPIC conferences, with particular attention to reflexive debates around the positionality of researchers and their respective research endeavors within and relative to their corporations. We then trace our careers and those of our ethnographic colleagues at Intel. What emerges is a shift from corporate ethnography as a research method and practice to ethnographers as delivering insight and knowledge with strategic corporate value. The more we can recognize the power of our knowledge, its scope, its limits and its privilege relative to other bodies of corporate knowledge, the more we can legitimately (and authoritatively) practice in the corporate environment.

In short, we critically reflect on our evolving social position in the corporate and our expanding claims to corporate knowledge. In this way, we follow in the footsteps of radical feminism, in particular feminist epistemologists such as Sandra Harding, Donna J. Haraway, Nancy Hartsock, Catherine MacKinnon and more. Knowledge, argues Donna J. Haraway, is socially situated and those in unique social positions, by virtue of their gender, class or, in our case, discipline, can generate and claim epistemic authority and privilege. However, to do so, and this is Haraway's warning, we must always temper our claims to such knowledge with the "severe check" of its scope, grounds and limits, lest we risk, as she says in the opening quote to this article, "breath-taking denials and repressions."

Following in their footsteps, we then review EPIC hot topics and hot talks from the following metrics: who are we as ethnographers (our social position) and what unique knowledge do we bring to the table, what defines this knowledge (scope and type) and grounds for its value in the corporate, and how does it compare to similar knowledge generated by others in the corporation?

EPIC hot topics, hot talks

In the past 4 years, we have witnessed a major intellectual and practical growth of ethnographic practices in industry – from an initial debate, in an almost manifesto fashion as Nafus and Anderson (2006) put it, about ethnographic theory versus practice (Baba, 2005) to a critical positionality of our work relative to the business in response to anthropology cannons (Cefkin 2006) to the unease about our epistemic claims of knowing and revealing "the real people" (Nafus and Anderson 2006) to John Sherry's (2007) direct assertion that

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[1] Noteworthy, besides all critical debates relative to the meanings (and prejudices) embodied in "the user," in the technology industry, the figure of "the user" is a critical one that now endows legitimacy and power (political and otherwise) to researcher's voice.

"we produce not theory but rather actionable insights for particular products and services" (p. 23). In short, EPIC became in part a site of our collective posturing and browbeating over our own corporate careers. As we take a closer look, we can trace this trajectory of topics and concerns that shows the ongoing transformations of our values in the corporation.

In 2006, we struggled for relevance and intimated that we needed to put uneasy stakes in the ground with claims of truth and more "real" representations in order to gain credence in the corporate environment. In this moment of the consolidation of an ethnographic project (Cefkin, 2006) in the industry, the debate thus ranged from the use of different modalities of representations to the claims of special relationship to "real people in the real world." Such claims, which "we ourselves have created to persuade others to grant us positions that historically have seemed implausible" (Nafus & Anderson 2006, p.244), have taken us to a place where ethnography has been embraced and become a more legitimate practice in organizations as well as part of their repertoire of "caring about" and understanding "the user." We had to stake a claim about how we, as ethnographers, not only had the skills and expertise to do our research but also to represent those findings in a way that made our grounds-up knowledge better than that of our colleagues. We thus found ourselves arguing that our representations were "truer" or "real-er". Indeed, we risked arguing for a certain authenticity to our representations, when compared with the slimmer slices of everyday life afforded by traditional market research.

From a different standpoint, Thomas and Salvador (2006) challenge the traditional marketing and design tools based primarily on the 'individual' at the expense of a more collective notion of people everyday life affairs. Sherry (2007) makes a similar claim when critiquing the one-to-one relationship between personas and products. As the former authors argue, this predilection toward individualist accounts can be traced back to the foundations of ethnographic work in Malinowski's notion of ethnographic practice as a means of grasping the native's point of view—an individual, typically male. This predilection is exacerbated as field accounts are translated into industry-wide sanctioned representations, such as, personals, users, consumers, what have you. To correct this trend, these authors argue for more system and relational representations, which situate people in their collectives as well as social, cultural, political, and economic settings. These in turn can better reflect not only these people as users or consumers but also as complex players in market and business activities.

In retrospect, we've learned that ethnographic research not only situates people's lives, preferences, and practices in the same systems in which our businesses and clients operate; it also has a longer shelf life than traditional market research. Demographic driven segmentations only work as long as the same people inhabit the same demographic. Similarly, product driven market analyses only work to the extent that the people charged with buying these products see the world in those terms—they rarely do. Ethnographic research offers a view of daily practices that can distinguish between what will be relevant now (such as, Chinese middle school student's favorite social networking site) versus what will change at a much slower rate (such as, parent's feelings about the importance of schooling for their young children.) In addition, being immersed in people's everyday lives and collectives also allows us a flexibility to adapt to the questions being asked, and these questions change far more frequently than we wish.

Differentiating ourselves in terms of a more grounded and therefore more 'realistic' representation of how people act as users, consumers, and purchasers gave us a foothold in corporate practice, especially in those business groups challenged by the paucity of available market knowledge, such as ours. However, we struggled with how to translate our representations into 'actionable' knowledge, as requested by our colleagues. The richness of life so relevant to academic anthropology had no place in the product development team meetings. Thus, as we strived for relevance and visibility, we had to hone our tools of communication, our images, and our voices.

Not surprisingly, in 2007, the EPIC theme was "being heard." Gone were the concerns over being recognized as legitimate researchers. In their stead were fears of being seen but not heard. The theme of representations and their politics surely re-emerged. In 2007, we remained deeply concerned with whose voices were represented and how, even if our voices remained relatively unheard. Nafus et al (2007) debated the limits of our design representations and embodiments that clarified voices and lives from people's daily entanglements. They also unpacked the politics of ethnographic representation that voiced only certain social, political, economic, and cultural manifestations but left others silent. Significantly, these more epistemic debates about (ethnographic, design, business) representations (and their roles as "boundary objects," mediating research and business) helped shift our attention to our employers' and clients' everyday practices and politics. As Cefkin (2007) suggests, we must pay greater attention to the performative practices of business (sales and marketing) meetings in order to gain deeper insights on the meanings of business representations. These meetings then act as sites of corporate meaning making through the interplay of localized (legitimized) market experiences, corporate global strategies, market data, and power relations. To a certain extent, 2007 marked a shift in our ethnographic gaze toward our own corporate practices.

By 2008, many of us were no longer merely researchers. Indeed, some of us had been 'promoted' to strategic planners, product innovators, and worse (gasp) management. Not surprising the hot topics shifted from being recognized and being heard to how poorly our ethnographic expertise had prepared us to act as managers and run businesses. A great deal of submissions reflected and rehashed on the position of ethnographic work within organizations – some offering frameworks to turn ethnographic results more relevant and impactful to their clients or companies (Flynn and Lovejoy 2008; Granka et al. 2008); some analyzing the ways in which companies positioned the work of ethnographers internally or outside as means of demonstrating a firm's innovation or simply marketing itself (de Paula and Empinotti 2008). These rich exchanges of experiences demonstrated one trajectory in the development of this community. In particular, as ethnographers working in product groups and business units (as opposed to separate research units), we were no longer merely 'informants' of outside 'realities' to inform design or business decisions, but increasingly being asked (often placed in positions) to make and, consequently, be accountable for important business decisions.

Here then is the arc of change. We remain valuable, we believe, to the corporation as researchers. We have also emerged as valued assets for strategic thinking about users, markets and businesses. On the one hand, our ability to sift through the rich practices of everyday life allowed us to also act nimbly in rapidly changing corporate environment. On the other, we actively pursued internal and external legitimacy, deliberately positioning our work and ourselves according to business needs and interests—maintaining this manifest relevance. However, to retain our emerging positions of authority in the corporation, we must answer the following questions: What are the parameters of our knowledge? What kinds of power are we endowed with this knowledge? Where do our ethnographic vision and the knowledge it generates meet the limits of its validity? We intend to tackle these questions in the following pages.

CASE STUDIES OF ETHNOGRAPHIC PRACTICE: FROM USER RESEARCH TO STRATEGIC PLANNING

Next, we examine our own work practices to track an evolution from design ethnographers (Salvador et al., 1999) for product development to business, market, and technology strategists for the larger business units. The underlying theme remains that of the dialectic relationship between our deliberate efforts to stay relevance and an expanded corporate recognition of and expectation for the applicability of our knowledge beyond research practice to inform corporate actions, as business evolves. In the following three case studies, we highlight discrete steps in this process: (1) the shift from exploratory product exploration to defining product strategy, (2) the shift conducting to performing user research to differentiate business value, and (3) the shift from applying our expertise to the lives of users to that of the lives of markets and businesses so as to inform not only product but now also market and business strategy.

To ground the following case studies, we give a quick history of our business unit, the Emerging Markets Platform Group (EMPG) at Intel. All three of the three authors work as research scientists in EMPG. Ours is a product group that operates under Intel's sales and market group (as opposed to being an independent product group, such as Digital Health and Digital Home groups). As such, we are strongly influenced by sales and marketing practices while also maintaining internally engineering and research activities.

In 2005, EMPG was thus formed into four distributed research and design units located in what Intel designated the emerging markets. These platform definition centers (PDCs) were located in Brazil/Mexico, Egypt, India, and PRC. Each relatively autonomous unit was charged with the definition of new platforms to address their region's local needs.

For the following two years, these PDCs set out to explore new ideas and design locally relevant, new-to-Intel products. At the core of their charter was ethnographic research. One by one, each PDC start creating its own local and localized solutions, each inspired by insights from the field. The challenge came when taking these solutions to market. Intel measures success in terms of volume sales. Local solutions, by definition, cannot achieve volumes typically recognized by Intel as a corporation. As our locally viable solutions were repeatedly stamped out by Intel's predilection towards volume sales, we realized we had to re-organize. By 2008, business decision-making was centralized and the PDCs devolved into ecosystem enabling and business development sites.

Not surprising, our careers followed suit. As ethnographers, we shifted focus from deep local knowledge to that of global trends. From 2005 through 2007, we worked in close concert with local industrial designers, engineers, and product developers. By 2008, we operated as a central research and definition unit charged with catalyzing and owning the definition of EMPG's global product roadmap. Our purview now spans from design ethnography to foundational product, market, and business strategy.

From product research to product strategy

In this first case study, we detail how we took the product definition lead out of the engineers' hands and used our ethnographic analysis to argue for a revamped product strategy. What started as a product refresh emerged as a product strategy that anticipated where computing in the classroom was headed.

For computer engineers the refresh of a product typically means hardware update and/or upgrade charged with fixing specific problems in the existing product. In mid 2006, things were going according to plan with such a refresh of a purpose-built education netbook. The PRC-based engineering team kicked off the product-refresh process. Ethnographers were invited to participate as the original design had been informed by ethnographic research in schools in India.

As an aside, the original ethnographic research proposed a completely different solution than that being refreshed in mid-2006. The original product recommendation was a slate computer that addressed the realities of India's underserved, populous schools. There students numbering up to a hundred packed into desk-less classrooms. A slate solution made sense in such an environment. However, during the product development process the slate was turned into a low-cost, full-fledged education netbook due to an executive decision in one of the final product development approval meetings. In retrospect, this was the right business decision for Intel as it allowed the product to reach out beyond the Indian classroom market. However, it was in many ways the wrong design decision for low-income Indian public schools.

Despite this mid-product development design shift, ethnographers were again invited to the table to participate in the refresh of this purpose-built education netbook. Our purview was to support the engineers' product development decisions with our user research. We are, however, an unruly lot.

This time, we could no longer support the development of what we saw as the wrong product. We rose up and stopped the refresh process. We could not agree to a simple product refresh, but felt we had to redesign the product from the ground up. We had to step up and clearly pick this fight. Over the phone we raised our "revolutionary flags" of innovation and carried slogans of methodological purity. We believed that the engineering team was not making the right decision.

We argued that we needed to revisit the underlying premises of the project, understand more broadly the various meanings of education worldwide, analyze the feedback from the ongoing school pilots, and procure newer and more effective technological solutions for the product rather than relying on solely on the typical course of action of the IT industry.

Against us was the relentless tick-and-tock of the semiconductor industry (a.k.a. Moore's Law), which determines Intel's product roadmaps and timelines. In a management level decision, we reached compromise: namely, we, researchers, were given time to explore the education domain and come up with a more innovative solution. In the meanwhile, engineers would continue to define a device refresh. We set the path for 1.5 (refresh) and 2.0 (redesign) versions of the original product. Also, we unwittingly set the course of our ethnographic practices.

At the point that we opposed the engineering 'natural' course of action, we no longer just played our typical role of information providers, in this case being the procurement of information (aka user needs) that ideally supported the engineering team's design decisions. Instead, we assumed more responsibility over the product as a device in the hands of students as well as a Intel business endeavor. We no longer simply argued on behalf of the end-users, but also on behalf of our business unit. We opened a new space of work engagements and entanglements and assumed the role of product strategy, certainly a dog-eat-dog world.

By challenging the typical development cadence, we risked delaying the roadmap and subsequent product release. We then had to justify our disruption. To do so, we asked for time. Our instincts told us that a simple refresh was not good enough for the users and our business and that the risk to Intel's business should we go forward with the wrong product was too high. So we asked for time to gather more grounded knowledge of what was happening in schools in the emerging markets, in the classrooms, in the administrators' offices, in the halls of those supplying schools with their technology solutions and beyond. Management asked us to translate a re-invigorated knowledge of the education domain into a new product design as well as redefine the product development process so that technology driven refresh cycles did not happen again. It was at this point that we unwittingly found ourselves shifting from the back seat to the driver's seat for EMPG's product definition.

In months that followed, we explored the meanings of education in Latin America and beyond. We conducted field research in Brazil and Mexico where we gained a deeper understanding of the values and social, economic and political realities of the local education systems. As often in the industry, we partnered with a research firm, which played a central role in supporting our research activities. In addition, we gathered the results from the original research conducted in India, tapped into a number of colleagues doing ethnographic research elsewhere to get their expert options relative to the education systems in their field sites. Shortly, the results of this work gave us a clearer understanding of various education systems worldwide – it is beyond the scope here to detail our findings, but suffice it to say that they pointed to the different (often, symbolic) meanings of (and expectations toward, thereof) technology in education across different socio-economic-cultural settings, geographies, and social groups. Some saw technology as a means of socio-economic transformation—the ways in which technology is a promise of change, helping revamp the local education system and bring fresh opportunities for students. Some others were not at all interested in changing their education system status quo but supporting and making it more efficient and effective by means of technology use. Clearly, technology was in a large number of cases a 'check-box' in governments' surveys, assessing and promoting their education system.

Our analyses pointed us to a complex network of actors, artifacts, politics, and economics that we then had to translate into relevant technology, design, and business actions. Working closely with industrial designers we crafted these insights into design concepts and eventually material artifacts. Flexibility was our main design concept to manifest the diversity of education systems worldwide. Our ethnographic stories about the various meanings and values of education—enacted through the pictures of sites, artifacts, and participants as well as their quotes—legitimized and sustained the idea of a technological and business *flexibility* necessary to address education needs worldwide. On the one hand, a product would need to operate in and support a wide range of socio-economic-technological-political environments—from environmental conditions (such as, room temperature, humidity, handling, power supply, safety, and what have you) to local teaching and learning practices to national and local curriculum to local image of modernity and progress.

FIGURE 1 Learner-centered framework that guided the design of the next generation of Intel powered classmate PC

From our ethnographic stories, we created frameworks, or visual representations that depicted and summarized the complex relationships among actors and artifacts. These served to ground the design and business decisions in grounded, "real" data. These frameworks were not scientific models against which our designs could be validated. They were, instead, rhetorical devices to remind designers and engineers of who and what would be impacted by their design and engineering decisions. Such as in the framework above (Figure 1), frameworks convey certain values (e.g., the learner placed at the center showing that we were designing primarily for student populations, in particular, young kids), relationships (i.e., all elements linked to a central one), settings, and actors. We used these frameworks to create a context that told diverse stories about the field and succinctly grounded the ongoing conversations and decisions in our situated knowledge.

Wakeford (2006) argued that the use of PowerPoint to present ethnographic findings as produced evidence of both the on-the-ground work and of the existence of an analysis, the traces of ethnographic thick description. It was to this end that we used these frameworks. As rhetorical devices, they draw on the aesthetic to convey stories behind the images – our own relationships with and experiences in the field. We also used these frameworks to convey a sense of authenticity, reflexivity and humanity. The young Indian student at the center (Figure 1) powerfully reminded us for whom we are designing this technology and at the same time seduced us (Tunstall, 2006), placing us in a relatively uneasy position of being somehow accountable for the future of that "Indian boy."

In making the case for a deeper understanding of the education systems worldwide, we also created a space for ethnography to play a more central role in product definition. We had to occupy a strategic (power) place in the organization in order to ensure and maintain the *legitimacy* and relevance of our work. We forcefully used our situated knowledge of the field to claim that we had the knowledge and the right vantage point to define our next educational product.

In the two years since this project, our responsibilities have followed the arc of this change. We are no longer merely design ethnographers charged with inspiring others' product design and development. We now own EMPG's product roadmap with a slate of ethnographically grounded products lined up for the years to come.

From product strategy to business deal-making

In the case of our research for the Intel-powered classmate PC, we grounded our claims to product and market knowledge in research practice. We made claims of more accurate knowledge of how children would use our products as well as how education official would evaluate our projects by conducting the research. However, we also saw that the value of our research extended beyond product definition and design to point our product roadmap in a more impactful direction.

In the following example, the value of our research once again is extended beyond the actual research practice to become the currency with which to close a deal with the Chinese Ministry of Information Industry (MII). That we had unique ethnographically grounded knowledge of how PRC rural residents valued computing and could demonstrate it on the ground persuaded the MII to partner with our company to develop computers for the Chinese rural market. In this case, we had conducted extensive ethnographic research in the Chinese countryside. However, it was simply the demonstration of that knowledge with MII officials at our side that convinced the MII to entrust our company in partnership with another China-based manufacturer to build computers for farmers in China.

In early 2006, the PRC MII released its five-year rural informatization plan. The goal was to bridge the urban-rural digital divide and bring digital technology to rural Chinese in order to enhance their economy and lives. From Intel's point of view, the rural Chinese represented a huge, untapped market in the PRC. As a result, we welcomed an opportunity to work with the PRC MII on this project. To demonstrate our commitment, Intel signed long-term memorandum of understanding (MOU) with MII that expressed a commitment to assist local PC manufacturers to develop new solutions specifically for this five-year program.

However, the competition for access to the rural market was intense. In order to solidify our business relationship with the MII, Intel needed to demonstrate its knowledge of what rural residents needed from computers as well as our expertise to translate that knowledge into relevant, working solutions. Intel worked closely with the PRC MII and our business group (the Emerging Markets Platforms Group, EMPG) to propose a joint research project to understand the needs for technologies from rural people in China. A joint MII and EMPG team was quickly built, including us, the ethnographic researchers. We, the ethnographic researchers, had a leg up on the research question as we had been conducting such research for over a year.

Not surprising, we had to negotiate what counted as "research." For the MII officials, "research" meant talking to different levels of officials in rural areas to understand what problems rural residents were facing and what needs and desires those had. It did not include talking to those rural residents. This "research" consisted of a series of formal meetings where rural officials came and gave reports and then afterwards drank dined together.

When we suggested that we should spend time talking to rural residents themselves, one official responded, "They [rural residents] knew nothing about technologies, we decide." The more we pushed for more "ethnographic-style" research, the more the power dynamic emerged. We compromised and agreed to have both meetings with rural officials and then take the MII officials out to the field. While we proposed ethnographic style fieldwork, we were clear that the fieldwork was more of a demonstration of our knowledge.

During those two weeks in villages and towns in Henan province, we attended long meetings listening to government reports as well as went out to talk to rural residents. Sometimes we even managed to persuade the MII officials to accompany us on the latter trips. During our fieldwork, we sat with villagers in their homes, talked to them about their lives and concerns and drilled down on questions about their children, their health and their futures. When the MII officials joined us, they fought against the rigor of our work. Many, at the beginning, pushed us to shorten the interviews or ask the villagers to come to them. We resisted and by the end, many of the officials saw the value of our work. In the words of one official, "It's my first time to go deep into villages and talk with real villagers in a research project. I think now I understand how you guys do research and it helps."

What they witnessed in the field was not simply what farmers wanted, but how we in EMPG could take that knowledge and turn it into relevant digital products for those farmers. The value of this knowledge was exponential. It not only meant that our company could be entrusted to design relevant products to deliver on the central government's rural informatization plan but also they would be saved from having to do this work themselves, in particular heading down to villages and sweating out hours talking to the people who would benefit most from these products.

It also helped that we conducted the same fieldwork on them, the officials. For those two weeks in the field, we worked and lived alongside the MII officials. We attended the same meetings, dined together every meal, and talked far beyond the agenda at hand. We saw how they made decisions, how those decisions might, or more likely might not, take into account the rural residents' needs and desires. We evangelized our ethnographic expertise and applied it all at the same time. The result was a very solid business relationship where we demonstrated a value they did not have (grounded knowledge of rural residents' computing needs) and tailored our business contracts towards them as we now understood them.

After this joint research, relationships between the MII and Intel in general improved. Memorandums of understanding were produced and signed by both parties and we collaborated with others to produce a government-subsidized personal computer for rural Chinese. In this case, our roles as ethnographers went far beyond that of our research. Indeed, our role was more performative and symbolic. We demonstrated the kind of knowledge that ethnographic research generates and it was this demonstration that clenched the trust of the Chinese government that we, Intel, would be the right partners in their plans to bridge the urban-rural digital divide. As ethnographers, we deliberately position our knowledge and ourselves in ways that created trust and grounded authority relative to rural China, shifting our role from pure researchers to valuable chips in business deal-making.

From product to market to business strategy

As our business unit increasingly recognized the symbolic value of our research (and put it to work to clench business deals and even bolster our corporate differentiation), we began to identify significant gaps in the kinds of knowledge our research had typically generated. These gaps were most glaring in terms of market and business strategy. Some of these gaps pointed to legitimate boundaries of our expertise. Others represented new frontiers for us to explore.

For the last four years, we actively informed new product definition and development as part of a business group charged with creating new platforms for new (to our company) markets. We tailored our research to understanding who might be a user of Intel technology, how and why. From there, we translated our insights into portraying the shift from non-user (in Intel's terms) to "user" and the products and technology that inspire that shift. In short, we explored populations who did not yet or even want our technology with the question of how and why they could. From there, we recommended product concepts to catalyze the transformation of non-users (ordinary people) into "users" (critical forms of subjectification implied.)

As we tracked our concept recommendations through product definition, product development, and then go-to-market, we noticed key gaps in our business group's market knowledge. From our perspective by working from the ground up, we saw the mismatch between existing data sources on our markets and the industries and organizations that had to make sense of our product. In short, we realized that we had key information to inform our group's market and business strategies.

We started with a segmentation of the global education market. Frankly, prior to this, our group had been flying blind, unclear as to the landscape of our global market and how to steer our course towards the more viable and advantageous segments of that market. This was exacerbated by the general deficit of market knowledge. Traditionally, in mature markets, entire industries emerge to design, scope and track key market metrics. Think of companies such as IDC. These, for better and worse, become the defining elements of a market.

When it comes to new markets, this data simply does not exist or what does is rarely consistent or reliable. We had to start from scratch. Here the ethnographic practice shines (or put it more bluntly, it has a "competitive advantage.") Given the right focus, we as ethnographers can unpack the grounded values of a product in a market and understand who values that product or service, how, when and why. The point here is to define these values in terms of all those willing to purchase the product or service, from our customers to their customers (the end-users), and the "job done" by that purchase (Christenson et al, 2006). At its core, the question is a business one. The best method for answering it is ethnographic.

To be fair, to arrive at this market segmentation, we relied on a diverse body of research, from quantitative studies to industry analysis to user assessment studies to ethnographic studies. Ethnographic analysis was but one contributor. However, when it came to clustering this diverse body of knowledge into market segments, we relied most heavily on grounded data. Ethnographic research defines how people evaluate their lives and the products they acquire, use, discard and not. The symbolic values of a product are on par with what might be considered the "real" or use values of that same product. Ethnographic analysis allows us to answer in the terms of all those involved, what is being purchased when a particular product or service is considered, acquired, consumed and used. In short, we are privy to the symbolic values of products endowed by people in their everyday affairs (and decision-makings), not one projected by our product roadmaps or industry analysis.

This ability to represent deeper knowledge about people's everyday lives—consequently acting as a knowledgeable representative of them in our organization—granted us certain authority, which in turn helped to legitimize our knowledge and narratives as well as to reposition our roles within the group. The market segmentation we developed, as a more legitimate representation of the 'market,' continues to provide a language that guides our business group strategy in terms of how we focus our current and future market activities. It also has gained traction to do the same for other Intel business units that target schools around the world. With this, we found ourselves joining a strategic planning team chartered with streamlining strategy and innovation.

The shift from product definition to strategic planning posed more challenges that that of segmenting a global market. At Intel, strategic planning is a catch-all phrase that spans partnering and influencing strategic deliverables throughout the company. It requires a combination of business acumen, organization savvy, networking capabilities, and expertise in certain technical areas. We were a bit over our heads in terms of the business acumen and technical savvy. Thankfully, there were others on the team to fill those roles. Where we gained legitimacy was in providing the knowledge (by means of a set of rich 'real' stories and a language to legitimately talk about "real people, real needs") with which to vet business concepts in terms of their value to all who might touch it (from our customers to theirs) as well as frank understanding of where to start to substantiate the competitive landscape in which any such business must play. For new businesses and new markets, a grounded understanding of where the competition lies and how is critical. It rarely can be found in traditional market and industry analysis. Instead, it requires grounded instincts, in short, the kind of knowledge that open-ended ethnographic research builds.

CONCLUSION: ETHNOGRAPHIC KNOWLEDGE IN THE CORPORATION

Construing ethnography in industry as a project, as Melissa Cefkin suggested in 2006, allows us to more fully appreciate the evolving nature of our endeavors. The aforementioned cases illustrate the ways in which our ethnographic project has continuously transformed as the result of our interactions with the field and the corporation. By grounding our representations of the field and translating these into business ready data, we bolstered our claims to a unique and powerful corporate knowledge. Over time, we constructed a case for ethnography practices in the corporation and that case pushed us towards new roles and new challenges, each with more business responsibility than we had encountered before. Ethnography became more than an ensemble of methods and practices in our organization, but a fuller project that introduced a legitimate way of generating product, market and business knowledge.

Such a project was (and still is) about constructing and sustaining knowledge and knowledge positions—means whereby we maintained our relevance. First of all, our notion of knowledge here is both a performative and practical one, not necessarily a step of knowing somewhere between data and wisdom, as commonly construed. Our ethnographic encounters and experiences with/in the field ground and situate what we know (and feel) about those who we are interested in knowing more about and their realities. Such a situated knowing, to borrow from feminist epistemologists, reflects particular standpoints relative to the subject, comprised of gender differences, our positioning relative to the people we study and the corporate, our (socio-economic-cultural) background and political stances as well as theirs. And, it is necessarily embodied. Our knowing is grounded in experiencing the world (and the field) with and through our bodies. One of the hallmarks of ethnography is to be able to locate what we know in extremely rich and grounded accounts of people's everyday (social, political, economic, cultural, material) realities that, in turn, grants us a rich measure of authenticity and interpretive flexibility. Nevertheless, such an ethnographic knowing is of little, or even no, value if not appropriately performed and enacted in the meeting rooms. The transformation of our work practices, as aforementioned, did not happen by chance, we deliberately changed and adjusted them to match the ongoing changes in our organization. We can think of our alleged success as an active process of legitimizing our work by mobilizing the appropriate 'stakeholders,' creating enough interessment (Callon, 1986) to sustain our relevance, and becoming the local knower (power issues implied). In this process, we changed ourselves while changing the organization of which we are part.

We then find ourselves sustaining such tropes of knowledge legitimacy and authenticity. We were endowed with an authority over the production of the "real", or as one general manager put it "you, ethnographers, are the ones who know life as it is." Yet in this process, we have unwittingly found ourselves somewhere else—though we imposed changes in the way there. As result, we were placed (or maybe "displaced") in a different "discourse regime," as Foucault would put it. The practices and disciplines governing the ways in which we make use of our ethnographic knowing changed once we started to interact more intimately with the corporate discourses and practices. We still struggle to resituate and ground our claims to knowledge in representations, languages, and discourses that mediate the realities we witness and the corporation within which we work. We have deliberately made ourselves relevant in this new position and have been rewarded with what appears to be promotions and advancement up the so-called corporate ladder.

In these new positions, then, we must re-evaluate our claims to knowledge, their limits, their opportunities, and their embodiments. We must not be seduced by the power of our progress, the apparent value and breadth of our knowledge practices, and the like. Yet, at the same time, we must also learn to exercise our newfound authority to hope for change of our business, people we touch, and ultimately ourselves. As we narrate our own trajectory within this business unit—from simply "informants" to product and business strategists to dealmakers—we come to realize the profound transformations in our ethnographic doing and knowing over the past few years as we struggle for legitimacy and relevance. We reached and experienced new forms of ethnography that the "founding fathers" of this discipline would have never imaged—we are definitely over the theory versus practice debate as we continue to create theory with our practices. Our acute and often critical look at things (most important, ourselves) has given us an edge that enables us to stay relevant, at least for the moment.

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Guides not Gurus

CATHERINE HOWARD
Jump Associates

PETER MORTENSEN
Jump Associates

The past quarter century has seen the deployment of ethnographic methods in business grow from a curiosity to a prerequisite for success. But in the process, the outcomes of ethnographic research – customer empathy, strategic directions, lasting market insights that shape design – have not been adopted at the same rate. The hand-off from ethnographers to designers and business decision-makers is the biggest challenge to success.

The time has come for ethnographers to again reframe their role within business. Rather than acting as interpreters between the lives of ordinary people and the companies who serve them, ethnographers have the opportunity to instead help the entire business organization to gather a clear sense of its customers' lives. Ethnographers need to switch from being gurus of customer experience to being guides who take everyone in the company into the outside world.

INTRODUCTION

In the late 1990s, a group of senior executives from Mercedes-Benz realized that the company's out-sized success over the previous thirty years threatened to destroy it in the long term. They were concerned that Mercedes had become so closely associated with wealthy Baby Boomers that the brand might have trouble connecting with a new generation of drivers. In order to reach younger drivers, the company needed to reinvent itself. With that goal in mind, a group of twenty executives set out on a trip to San Francisco to meet with experts on innovation. As part of that trip, they invited a team from Jump Associates to join them for an afternoon.[1]

The meetings were held at the Fairmont, a luxurious hotel in San Francisco. As the team settled into their chairs, we ran them through a quick slide presentation to give an overview

[1] The Mercedes example, as well as that of the Nike Presto and Intel persona, are adapted in part from Mortensen's co-authored work *Wired to Care: How Companies Prosper When They Create Widespread Empathy*. FT Press.

of Jump's work and our philosophy. To their tremendous surprise, we told them to forget about innovation. Their obstacle to success with younger Americans was not that the company's technological capabilities, which are world-class, nor their creativity. Instead, the challenge was that the company was trying to make cars for people they didn't know very well. Mercedes needed empathy, not innovation.

Our team then opened the conference room doors to introduce ten men and women from the Bay Area, all of whom were in their twenties. These folks had volunteered to spend time talking to Mercedes about who they were and what their lives were like. The Mercedes group would divide into teams of two. Each pair would spend time talking with one person. We asked each team to interview their participant and find out a little bit more about them. The goal was to get to know them as people. For their part, each young person had been asked to bring along photos of things that were important to them: their home, their friends, their passions. The teams had half an hour to find out more about the people they interviewed and hear some of the stories about their lives. After a half an hour, we closed the interviews and announced that it was time to start the second half of the workshop.

Each team of executives was given two hours, fifty dollars in cash, and a map of downtown San Francisco. Their assignment was simple: Purchase a gift for the person they just met. The activity was designed to show the executives how much they had learned about the people they had interviewed. After all, when you give a gift, it's both a reflection of who you are and who you understand the recipient to be. As such, team success would be evaluated on one simple criterion: how much their recipient liked the gift.

Two hours later, the teams returned with admittedly mixed results. Some teams came back with rather generic tourist knick-knacks, like plastic cable car toys and Golden Gate Bridge-emblazoned sweatshirts. When we asked them why they chose to buy mementos of San Francisco for people who live in San Francisco, they admitted that this hadn't occurred to them as a problem. One team came back with a bright red fanny pack, which similarly failed to thrill their 25-year-old participant.

Other teams fared much better. One group had met with a guy named Cam who, after years working for a big Silicon Valley technology firm, was gearing up to start his own business. Our execs bought him a book on entrepreneurship. They had a little money left over, which they tucked inside the front cover as a bit of seed money for the new venture. As they described why they thought Cam would like it, it was clear that they had come to know him surprisingly well. They described in detail what it felt like for Cam to struggle with the uncertainty in his life. A few of the other execs snickered at the extra twenty bucks inside the book, but the team insisted that, when you're starting out on your own, every little bit helps. Many of the other gifts turned out to be nice little encapsulations of the empathy that the teams had developed in a short period of time, too.

The point of the workshop was fairly straightforward. First, we wanted the Mercedes executives to meet some real-life young people. Second, we wanted to get them out on the streets of a major American city, absorbing information through all of their senses. But most importantly, we wanted them to start to think differently about the cars they made. You see, on some level, every product has to function like a gift – a physical manifestation of a relationship. It's both an embodiment of who the giver is and what they think of the receiver. When you get a great gift, you can't help but feel like the other person knows you on a deep level. When you get a lousy gift, you wonder if they even thought about you. The same is true for products. A great one makes you feel like someone out there gets who you really are. A lousy one makes you wonder what the company was thinking – or whether it even thought at all. Maybe the company was just regifting something that was originally intended for someone else. Our auto executives needed to make their cars into thoughtful gifts if they wanted younger customers to care about them in return.

The trip to San Francisco gave the Mercedes team a short glimpse into the lives of the people they wanted to sell to. But the team also walked away with personal memories of why it was important to pursue this business opportunity in the first place. They had met the young people they had previously only read about in research reports, and they had genuinely started to care about them as people. Moreover, they instituted an ethnography-driven process to develop a new generation of luxury vehicles for younger drivers.

TRANSFORMING ETHNOGRAPHERS FROM GUIDES INTO GURUS

In recent years, ethnography has become widely adopted within corporations, from technology to healthcare to food companies. When we say ethnography, though, what exactly what do we mean? As with the Mercedes example, there are new ways of thinking about ethnographic methods and the impact they can have in a business context that diverge a great deal from classic approaches.

Ethnography, defined as a study of/writing about culture. refers to any research practices that study behavior in a naturalistic context. The aim of ethnography is to document and understand how people actually live their lives. Ethnography in the service of developing new products, services or even businesses works by moving the research team into the actual contexts of people's lives to understand the patterns of people's needs and desires. In our experience consulting with large companies to create new businesses and reinvent existing categories, ethnography helps our clients to understand patterns of behavior and beliefs from the point of view of participants, not our own. At Jump, we don't call the people we study "consumers," "users," "customers," or even worse, "research subjects." We call them participants, because we are only able to learn through their active participation in our process. Without them, we'd be nowhere.

The range of specific ethnographic techniques we employ at Jump is broad. Observation, intensive interviewing, and contextual interviewing are some of the common field tasks we engage in. We go shopping at the grocery store with our participants, we drive around in their cars with them, and we peer into their refrigerators and closets. We're interested in not only what people do, but why. And, often, folks can't tell you why they do something. As ethnographers skilled in the art of observing and interviewing people in the context of their everyday lives, we learn about their behaviors and beliefs through watching, asking, and listening for stories about what matters most to them. Through careful analysis, we bring forward our participants' unarticulated needs from the observations and interviews we collect in the field. Done right, ethnography can not only inform and inspire new product or service development but clarify patterns of thought and behavior to connect with strategic choices for our clients.

Our first challenge, legitimacy, has been overcome. Corporations, at least the ones who hire us, believe that ethnography is a worthwhile method for gaining insight into the lives of their customers. Now, however, we need to make the research stick and have a long-term impact beyond any individual project. And that's a big, hairy problem, for many reasons.

Executives and designers who don't go into the field often ignore research if it challenges their assumptions. And some companies may care more about what consumers think of their products than in understanding them as people. Clients all have ideas in their heads about what their customers look, sound, and act like. And it can be surprising to meet them face to face. We see behaviors, beliefs and attitudes that seem weird or aberrant that can often be the most insightful opportunity for our clients, as long as they're along for the ride. As humans we want to dismiss this behavior, but it can often lead to profound insights.

Ethnographic methods can be a tough sell for our clients – small sample sizes, expensive research plans and longer time frames for completion – but offer greater depth of insight. Many of our clients had been doing their innovation work through sheer luck and introspective ability. And for others it's hard to make sense of what might appear to be a contradictory jumble of opinions that may or may not synch up with what they know about customers from other, more statistically significant research. They've also had bad experiences translating ethnographic insights into action. They had fun doing ethnography along with the researchers, but got nothing lasting out of it. Consequently, they don't return for more.

At the same time, a loud chorus is saying ethnography can't do what it's supposed to in a business context. Anthropologists working in academia and other contexts have challenged the inherently proprietary nature of the work we do with corporate clients, and call us to either stop it or find better ways to communicate our work in the public realm. Others decry leading-edge research methods as a gross subversion of true ethnography. Then there are designers who say ethnography doesn't help them. As Don Norman has noted, ethnography doesn't tell you where to put the buttons.[2] As well, there are the finance guys who say the return on investment is never high enough. They question whether all this research activity

[2] Don Norman criticizes "exploratory" ethnography in "Workarounds and Hacks: The Leading Edge of Innovation" Interactions, ACM, 2008.

really leads to success in the marketplace. Any and all of these might be a threat to our burgeoning field.

To take business ethnography to the next level, we need to reframe our role by focusing the outcomes to give clients real value. And that's true even if that means broadening the definition of ethnography or creating new methods for developing empathy with participants. To help ethnography occupy a strategic role in business, ethnographers need to become guides for helping their clients discover consumer insights, instead of gurus who know more about people than anyone else. And we must find ways to communicate our value across our client organizations. Unless product developers have the same understanding as we do, they'll toss the research. Unless executives feel the opportunities we identify, they'll ignore them. And unless insight spreads widely throughout organizations, the impact of ethnography is ultimately blunted. To thrive over the long term, ethnographers need to become guides, not gurus. Here's our five-step plan to make it happen.

1. Get decision-makers to the gemba.
2. Teach clients about their most interesting customers, not the best ones.
3. Be your own guinea pig.
4. Reinforce your clients' good behavior.
5. Choose the right medium for your message..

FIVE PRINCIPLES TO MAKE ETHNOGRAPHIC RESEARCH HAVE HIGHER IMPACT

Get decision-makers to the gemba

Like few people in business, ethnography practitioners know the immense value of going to the gemba, a Japanese word for "the actual place." What good ethnography provides, more than anything else, are vivid pictures of real people as they are, instead of what they appear to be when abstracted into market research data. So much of what people do on an everyday basis is implicit. Only deep empathy can help us to understand what people truly value, instead of which products they like. Unfortunately, the difference isn't easy to detect when you're getting the information secondhand. Worse, skeptics tend to distrust any research findings that aren't validated through extensive polling of thousands of people, rather than the 12 to 20 needed for great ethnographic research. Again and again, ethnographers get asked: How do we know that what you saw with these people goes on with everyone else? We bring up the Cultural Consensus Model,[3] but it's rarely enough to instill lasting confidence in skeptics.

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[3] We make frequent use of Romney, et al's Cultural Consensus Model of informant competence, as well as its baseball analogy. Romney, A.K., S.C. Weller, and W.H. Batchelder. 1986.
Culture and consensus: A theory of culture and informant accuracy." American Anthropologist 88 (2): 313—38.

The only way to get skeptics to overcome their inherent concerns about ethnography's validity is to expand access to the real world. Rather than venturing alone into the field and reporting back, ethnographers can increase their influence by bringing a client team into the field to experience things for themselves. Don't just go to the gemba, take your clients there with you. Sure, they might not be as skilled in interviewing, and they'll need more time to come up with insights, but that's not the point. What an extended project team made up of clients and consultants gains is a collection of stories that shapes how they view their goals – and even how they sort through trade-offs during tough decision-making. The point of such work is not for clients to do great ethnography; it's for them to get a gut feel for ordinary people. The results can be amazing.

Back in the late 1990s, Nike's Explore innovation team was tasked with finding significant new businesses that the company could enter beyond its core in performance athletic gear. One of the most obvious directions that Nike could pursue was fashion. Many people enjoyed wearing shoes and clothing designed for sports as a casual change of pace. The team saw tremendous potential in this market and considered it one of the most promising opportunities Nike could develop. The company had a world-class brand and an enormous community of enthusiasts who treated its motto, "Just do it," as a slogan for how they live. It should have been a big win with minimal risk.

But things are never that easy. The word fashion was anathema to the culture at the company. If a product didn't embody athletic performance, it wasn't for Nike. Period. Knowing this, the team looked outward for inspiration. Though steeped in ethnography, they chose a different sort of observational learning – a cultural immersion. They would go to the gemba. From the top-level managers to researchers and engineers, the whole team started visiting college campuses to understand what was going on with students, whose tastes provide early indicators for trends both for adults and teens. As one of the team's leaders, Dave Schenone, recounts, the most interesting thing that his team noticed once it got outside of Nike's corporate campus in Beaverton, Oregon, was the shoes that students were wearing – or rather, what they weren't wearing. Big, baggy jeans were in at the time, so it was impossible to see sneakers or other modest shoes. As a result, college kids were going for extremely bold options like big, heavy Doc Martens boots.

This is a pretty big insight – that shoes are badges of personal expression, but normal sneakers were staying in the closet because they weren't eye-catching enough. And as the team recognized, making a shoe bigger isn't the only way to make it more visible. If Nike were to make a line of shoes in bold, flashy colors, they could be an ideal choice for campus wear – and everywhere wear, too. Color can express your personality, and the motion of your stride would variously expose and conceal a more bold side of yourself as you walked. Even better, the shoe could be designed to support both running and walking. As the team thought of it, this would be a shoe that you could wear to class in the morning, lace up for a two-mile run in the afternoon, and then make an impression at a party in the evening. The shoe that emerged, called the Presto (it came in eight "magical colors"), was an enormous success, and not just with college students. Many long-time Nike fans who had worn the company's shoes for years began to buy three or four colors of Presto to wear with different outfits.

But more than being a hit, the product line opened the door for fashion at Nike. The team's experience in the field helped executives to see that there was a clear market for gear that could cross categories between life and sports. Presto proved you could make a fashion-forward shoe that was a performance running shoe at the same time. The new category inaugurated by Presto, Sport Culture, has now grown to become one of Nike's largest product categories, offering everything from stylish shoes to casual everyday clothes and even limited edition sneakers designed by artists. But if the project's managers had been told about the insights secondhand, they might never have bought into the validity of the concept. Taking decision-makers, not just researchers, to the Gemba has enormous power to speed change and increase the influence of ethnography.

Teach clients about their most interesting customers, not the best ones

Human-centered approaches to innovation are often criticized for leading to incremental products and services. In the eyes of many, doing any work that involves talking to ordinary people is inherently vulnerable to the innovator's dilemma. Often, this happens because of the groups that clients ask ethnographers to study. Since companies pay careful attention to the people who pay their bills, they typically ask for research that looks into the lives of their best customers: the demographics who buy the most products from them, or desirable new customers who have the most spending power. Unfortunately, aiming for the mainstream of any group will inevitably yield incremental ideas.

A superior approach to leveraging ethnography through innovation is to look to the edges. Don't just study your best customers – study the most interesting ones. Look for people with needs ahead of the rest of us whose lives offer a look at what we might become – or exaggerate characteristics we all have that are less evident. This is a commonly understood idea, but it is rarely used to make the case for ethnography as a source of long-term innovations. When you help senior executives to meet customers who are far outside the lines of a typical demographic breakdown, it requires them to think differently about their business and what people truly value. We witnessed this effect firsthand during a recent project with Harley-Davidson.

In 2007, Jump worked with Harley-Davidson on a strategy to drive new value from its brand community. It had worked before: Harley's turn-around in the early 1980s was built upon strong connections with motorcycle riders. Instead of just making products and seeing if people liked them, the company opened its doors and made loyal riders the core of its growth strategy. But twenty-five years later, that core demographic had grown about as much as it could. Baby Boomers weren't buying bikes as frequently, and younger people weren't naturally gravitating to the brand. Unless Harley found ways to connect to new consumers beyond the core market, it faced irrelevance in the short term. Jump was brought in to turn the brand community upside-down and inside-out to see its real potential. We knew that it would be critical to find a new model for brand engagement – including the structure of community interactions and the roles that people could play within them.

In order to establish credibility within the organization, the project included ethnographies of some existing core Harley riders. They told stories about their lives and discussed their involvement in the Harley brand community. But understanding these folks was only enough to maintain and evolve the core. We also took a trip to a major motorcycle rally and did intercepts to find out who actually makes the trek for such an event. As it turns out, many people in attendance were way outside of Harley's customer segmentation. There was the man who traveled the country with his cockatoo, frequently ending up at events across the country where his bird helped him to connect with people. There were the college kids who had come from hundreds of miles away to see what all the fuss was about. And there was even the group of real-life rail-riding travelers who took freight trains from city to city in order to find the most interesting scene. All of them fascinating folks, all of them very different, and all of them interested in being a part of the dream that Harley-Davidson promised.

Given the success that Harley-Davidson has enjoyed over the past several decades by connecting closely with existing motorcycle riders, it would be all too easy for the company to maintain a laser-like focus on its existing customers. But that could hurt the organization given time. In order to remain vital over the long term, Harley needs to understand the full spectrum of people who are affected by the company's business, from young couples to freight-train stowaways. Because our research so drastically broke the model of who a Harley-Davidson stakeholder is and what their lives are like, the company was able to begin thinking differently about how it could serve the members of its community. And as a result, the firm's relationship to the outside world was strengthened, made healthier, and grew their community.

Be your own guinea pig

Often times, as we begin to delve into issues that matter to our clients' customers, we forget that our own needs are not so different from theirs. Experiencing what consumers experience firsthand can give us, and by extension our clients, a window into their needs. If the client is a bank trying to design a new checking account, we go to a couple of other banks and open accounts with them to understand the experiences. If the client is a food company trying to develop products and programs for people who want to lose weight, we suggest everyone on the client and research team on a diet themselves. The team's experiences might not be 'typical,' but the team can still learn from them. In fact, the team will learn what customers experience at a deep emotional and visceral level, which might even be more valuable than learning through participant interviews. To make guinea pig experiments most helpful to inform product development, encourage the team to document their observations and emotions, paying special attention to things that frustrate, excite, confuse or delight. And don't just do it by yourself. Having an entire team go through the experience will help identify patterns that you can learn from.

When we were working on a project that was focused on getting people to eat more vegetables, the team needed insight around what motivates people to eat more healthfully. Everyone on the team decided to take a 'veggie challenge,' eating the FDA recommended five servings a day for a week and keeping a food diary to track how successful we'd been. To our great surprise, we all struggled to eat five servings of vegetables a day. Some team members found that they were replacing fruit and other healthful foods with vegetables just to keep up. Based on this guinea pig experiment, the team decided to stay away from a daunting, hard-to-achieve five-a-day message and focused instead on sending a more positive, achievable message about eating fresher and more flavorful foods. Had we not tried it ourselves, we might have stuck with the five-a-day message and lost customers in the process. Only by making ourselves the guinea pigs could we reach this level of insight.

Reinforce your clients' good behavior

Ethnographers make the greatest impact when they help clients to change how they think and behave. This can come across as scolding: don't do this, change this message, scrap this product line and begin another. And while telling a corporate client that they need to stop working as they have is certainly valuable, people are far more eager to change when the request is phrased as positive reinforcement. Instead of telling companies to stop doing the thoughtless things that aggravate their customers or telling them all the things they don't do that they should, it can be far more valuable to reinforce the good things they already do. Quite often, companies don't realize which things that they do have real value for people in the world. Ethnographers can bring about tremendous change just by helping their clients to understand how to do more of the value-added activities they perform today.

Doing that requires a deeper level of empathy for the client than is required to define the requirements for a new product or even family of products. It's about truly assessing your clients' strengths and understanding how they could be reapplied to meet different sets of people's real needs. The best way to do this begins the same way as any other ethnographic project. First, observe people as they go about their daily lives, whether at home, work, or play. Then, go find a way to observe people using your clients' products, services, or other offerings as they do in real life. Sometimes, that's no different from the initial observation – any home-cleaning products would certainly function this way. At others, this entails finding another location, and some times other participants. If you're working with a retail client, you might end up spending as much time just watching how the store operates and intercepting shoppers as they go about their business. The key here is to understand the underlying frames that guide the behavior of the people you're studying to figure out why they have chosen your client's offerings as the preferred solution to their needs. The reason is often surprising – and usually far off the radar of corporations.

Several years ago, a Jump team was working with Target on a variety of projects to take the shopping experience to the next level. We realized after a few projects that we couldn't merely improve the department by department. We needed a vision of the ideal state Target could offer its guests. Rather than just make up something cool, we decided to find out if Target already represented something that this larger vision could embody. Sure, it was obvious that people went to "Tar-zhay" for something a little nicer than they could find at Wal-Mart, but people don't stand by a company that stands for "slightly nicer." There had to be a more profound emotional need being met.

So we looked at the stories of the people we met in Target stores. And we were amazed that almost no one was there just to do their routine shopping. Many of them were purchasing a few staples for the house, but no one said that such sundries had gotten them out of their homes and into the store. Instead, they had all come in search of community. Moms were showing up on Tuesday nights together to shop for their kids but also enjoy a night out. Women in their 20s were getting together on Friday night for a girls' night out to catch up and buy a few things along the way. And fathers were showing up, kids in tow, on rainy Saturdays in search of family fun when the park just wasn't an option. This was really something. As Target had transformed what a discount retailer could be through design, the company's store guests were slowly converting it into a de facto community center – a new public square. One woman even told us that she shopped at Target because, when she was divorcing her husband, she felt "so weird and so crazy that I would go to Target three times a week just to be around other people who looked like me."

And from then on, when we worked with Target, we didn't just consider the unmet needs of the company's guests or how to create the best possible shopping experience in a particular category of goods. Instead, we worked toward the vision of Target as public square. In order to create a sustainable source of value, it was far more important to discover what big need the existence of Target fulfilled for people – and then help the company figure out how to do more of what they were already good at. And that's a point of differentiation that Wal-Mart and Kmart can never compete with by shaving another quarter of a penny off the price of a bottle of Tide. More, it has given Target a mission that makes the people who work for the company fired up to make an impact on the people they serve. It was a change that employees embraced easily, because it reminded them of the positive reasons they had chosen to work for Target in the first place. And that's why Target doesn't flip to trying to match Wal-Mart's prices, at the first sign of a recession. People count on them to provide community and a pleasant place to do the business of their life. They can't let them down.

Choose the right medium for your message.

Even in ethnography, the medium is the message. Too often, the medium is a PowerPoint, hundreds of hours of video or lengthy reports that send the message that it's for experts only. And that's a bad message. To increase the spread and influence of insights from ethnography, adopt media that people want to engage with – or that they have to. Using an ethnographer's keen eye, you can study your clients to understand how information travels inside their organization, and design your deliverables to fit into the way people do things. That way, the insight doesn't live in a report; it lives in the everyday interactions of the way people work.

One way to ensure the impact of our deliverable is to tie it to another object that always has a routine associated with it. Like many folks working in a corporate world, we had a client whose secretive office environment necessitated everyone to wear a lanyard and key badge to access their workspace. We looked for ways to build our deliverable – a set of strategic imperatives that should be applied across their work – into the client team's culture. One of our clients had a great idea, to attach the strategic imperatives to the team's badges. With their strategic imperatives attached to a lanyard card, one that's always with you in an office where you need it all the time, they were able to talk about the work no matter where they were. The lanyard card served as a constant reminder of what they were working toward.

We came across another good method for making ethnographic insights an everyday part of work several years ago while visiting Tony Salvador, a design ethnographer at Intel. He and the other ethnographers in his group have as strong a sense as anyone on the planet for how people are living with and, especially, interacting with technology. To reach the rest of the organization, the ethnography group translates what it learns about people into end-user personas, fictional people whose demographics, personality traits, and habits are based on those of the real people the team met. Such personas can provide touchstones in the product development process, but they wouldn't have any impact at Intel unless people read them. That's why Intel's ethnography group has created a unique method for spreading personas throughout the organization. The team has hit upon one of the rare moments when people sit down and have some time to themselves: in the bathroom. Intel posts the personas inside restroom stalls, where they're easy to access and read. After all, people are going to spend time there anyway. Why not help them learn something in the process?

BE A GUIDE, NOT A GURU

Today ethnography has more attention in business than ever before. But that attention does not translate directly into influence. In order for ethnography to fully realize its potential to transform companies' understanding of their customers, and the role their products and services play in those lives, it's quite possible that we need to reframe our role. This shift in role demands that we as ethnographers let go of our expertise. By relinquishing our tight hold on the methods and dissemination of customer insight, we enable our clients, and by extension, our work, to chart new trajectories of impact. If you love something, set it free.

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Close Encounter: Finding A New Rhythm For Client-Consultant Collaboration

HEINRICH SCHWARZ
ReD Associates Germany

MADS HOLME
ReD Associates Denmark

GITTE ENGELUND
Centre for Design Thinking, Oticon

In the current economic uncertainty ethnographic consultants are asked to intensify their client focus and to demonstrate and improve the relevancy and impact of their work. This paper reports on a case of close collaboration between client and consultant during an ethnographic consulting project. It discusses three crucial challenges: the challenge of aligning expectations and clarifying roles, the challenge of cultural differences and confusion over ethnographic methods, and the challenge of finding the right rhythm between close interaction and useful separation. Written from both the consultant and the client perspective we describe how similar situations were experienced differently by both parties, analyse what underlies some of these tensions, and suggest some lessons for ethnographers and clients alike for future close encounters. The paper suggests that the central challenge lies in finding the right balance between client-emic and client-etic positions and in inviting clients into the process of doing consulting 'magic'.

INTRODUCTION – DEMANDING HIGHER IMPACT

In the current uncertain economic climate companies need to be assured even more than in the past that their investments will yield clear and expected returns. The days when companies spent money on exotic research projects, on nice-to-have rather than must-have studies seem if not gone then at least suspended. In such a climate business anthropologists and ethnographers working as consultants are asked to justify and demonstrate the relevancy, contribution and impact of their work to their clients with renewed urgency. They must show convincingly that they are useful and trustworthy advisors to their clients.

A growing strategic demand from clients for ethnographic consultants is to engage with them more thoroughly and deeply during projects, rather than remaining purely external professionals who hand over insights and recommendations at the end of projects – as if from the protected laboratory. Bridging worldviews and raison d'êtres, of course, has always been a crucial task for ethnographers, and the ethnographic toolbox has provided us with the means towards studying the real world and real people. Yet we tend to employ these skills towards understanding our informants and less towards understanding our clients and our interaction with them. As a result, a close engagement between client and ethnographic consultant poses unanticipated opportunities and challenges – making it a worthwhile learning experience on how to involve clients to produce results that have traction and are likely to live on once the consultants have left.

Using an actual project as example, this paper focuses on the challenges emerging from the close collaboration between client and consultant during the course of a project. The example raises significant questions about the ways in which the two respective professional practices need to be coordinated and synchronized to find the right rhythm in the dance between client and consultant. Speaking from both perspectives, the consultants' and the clients', we seek to illuminate what can be learned from such client-consultant collaboration for a more engaging, successful and long-lasting embedding of ethnographic practice in industry.

Collaborative approaches have a long tradition in ethnography, as described for example by Lassiter (2005). However, whereas Lassiter and similar discussions focus on the need for a collaborative approach between researcher and informant in the production of ethnographic texts, this paper explores the collaboration between consultant and client, where the friction plays out in different ways.

In our discussion we seek to address the following questions: Can such an intimate interaction in fact achieve what it sets out to achieve, that is to tailor the results of ethnographic inquiry and resulting recommendations to the client's needs and deliver them to be implemented with success? How can clients become credible ambassadors of the project in terms of both results and methods? How can consultants find the right balance between being insiders and outsiders to both keep a fresh perspective and enable impact? And how can ethnographic consultants who often produce their work behind closed doors be transparent at the same time as they try to be persuasive, how can they closely engage with the client while coming to grips with complicated findings – or advise at the same time as they analyse? While tackling these questions, our primary focus is on the challenges and problems client and consultants face in such a close encounter.[5]

SETTING THE SCENE FOR COLLABORATION

In the fall of 2008 our consulting firm conducted a research and consulting project for a global hearing aid manufacturer. The project's overall goal was to improve the client's understanding of the daily work practice of the independent retailers who usually sell the devices to end-users – a business-to-business project. Field research was conducted in two

5 Although the client is co-author for this paper, it was predominantly written from the consultant perspective – EPIC, after all, is the ethnographic consultants' community and audience. Yet the clients' experience, their thoughts and opinions are present throughout the paper paraphrased or as actual quotes drawn from discussions and a text written by the client as foundation for this article.

main markets, the US and a European country. The immediate client who initiated the project was an innovation and design unit within the client organization. The unit's mission was to discover customer insights, subsequently build competencies and inspire the engineering-focused organization to get closer to their customers and end-users.

As a consultancy based on ethnographic practice we have always aimed at making the client part of our processes at relevant points in a project. For instance, we usually bring the client with us to the field in order to expose them to the real world and our methods. And in order to become more familiar with data and insights, we always organize collaborative workshops during the course of projects. Yet, in this project we took the client engagement to another level. Rather than having client team members interacting with our project team just intermittently, the ambition was to establish a fully collaborative client-consultant team that would work together during all project phases, from beginning to end.

The team setup was not without challenges. Our team had two project managers and was staffed with a roughly equal number of employees from our consultancy and the client organization – three core team members on our side and two full and two half-team members on the client side, with a cross-functional representation from marketing, software development and the innovation unit itself (the client project manager was from the innovation unit). As close collaboration was a high priority we were allocated a dedicated space in an open office environment at the client's headquarter and were encouraged to work there as much as possible.[6]

The intent behind this arrangement had several dimensions. The client had commissioned user-centric consulting projects before and had learned how quickly otherwise useful insights could get lost in their organization. By participating in every step of the project they wanted to ensure relevancy of the insights and warrant organizational ownership of the results. The team members should become ambassadors of insights and recommendations once the consultants left. They also hoped for more relevant and interesting insights where the consultants could utilize and build on the client's insider knowledge of their products, the market and the business-to-business situation under study. Furthermore, the clients hoped to extend their own innovative capabilities by learning from the immersion in the methods utilized by the ethnographic consultancy. Finally, they sought to assure a high level of internal collaboration and buy-in by having team members from different units and departments work together on this project.

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6 Beyond the immediate team part of the project was a senior management steering group and an internal stakeholder team consisting of twelve members of the client organization representing different functions and departments. This setup aimed at further facilitating internal buy-in before, during and after the project. The commitment of the steering group and stakeholder team was an important element in establishing a sense of urgency surrounding the project at the client organization. This was given momentum through the dedicated effort of the leader of the innovation unit.

Quite similarly, based on previous projects we as consultants also knew how difficult it could be to have our insights and recommendations actually taken up and implemented by our clients once we leave. We had learned that it took more than just striking insights and a nice presentation to make changes happen in large corporations. Working closely with clients at every step, we hoped to better understand the client, their organization and their everyday and strategic needs, and thus be able to develop recommendations and concepts that fit.

Following this plan we in fact worked more or less as a collaborative team through every phase of the project. We defined the scope of the project, planned the fieldwork, recruited informants, went into the field, analyzed the data, organized workshops with the larger client stakeholder group, developed recommendations and presented large parts of our final presentation – all of this more or less together and over a period of about three months. This degree of collaboration was as new to us as it was to our client.

Overall the embedded format worked quite well. From our perspective, we did in fact understand our client more deeply than we could have through other means. The growing trust between us made it possible to learn about political issues within the organization beyond official stories that we needed to be aware of. The advantage of spending so much time together was that "it created an open atmosphere with humor where nobody was afraid of saying what was on their mind and whether they disagreed with the other team members" as the client put it. The embedded team approach was a very useful ethnographic setup to get closer to the client both through conversations and observation. As a result we believe our recommendations were in fact better aligned with the client's needs, expectations and capabilities. Our physical presence at the client's premises over a three-months period was also helpful in another respect. Our visibility at lunch and in the open space office generated a kind of curiosity for the project that laid the ground for more easily spreading insights and recommendations throughout relevant parts of the organization. We no longer were external strangers who handed over exotic insights but "people we have seen before and whom we know can be trusted".

For the client, the collaborative setup was overall also successful since they felt they learned the process of user-centric innovation from the inside out and through all stages, not only in theory but in practice. As innovation unit with a user-focus they could expand their skills and move closer to conducting such a project by themselves. But even more importantly the client team members stood behind the insights as proud co-creators. They became successful ambassadors for the project insights, spending several weeks after the official end of the project busily presenting the work to different parts of the organization, facilitating workshops and having informal conversations throughout the company. They owned the project results and were able and willing to not only communicate but promote them.

CHALLENGING THE CLOSE ENCOUNTER

However, for this paper we have chosen to emphasize the challenges that emerged and not the successes, in order to be able to learn from them for future projects. In the following we will discuss three: the challenge resulting from different expectations of roles and responsibilities among clients and consultants, the tension emerging from different professional cultures and levels of expertise, and the tricky task of finding the right distance in the dance between client and consultant (and the problem of doing magic in the open). We describe how clients and consultants experienced these situations as problematic in their own respective ways and ponder what it is that may underlying forces may have led to these situations. Finally we suggest what may be learned from these cases for a more productive close client-consultant collaboration.

Mismatched Expectations – Who Is In Charge?

"We as a company had bought the consultancy's knowledge and competences, and at the same time we wanted to be an integral part of the whole project – so who had the responsibility?" One of the single most important challenges for every team project is to clarify roles and expectations. As the previous quote from our client illustrates, this is not always a simple process. We as consultant assumed that we were responsible for the project while it was ongoing and the client team would be responsible once the consultant team had left the building. Yet, who was in charge was not really settled from the beginning and this created some tensions along the way. The core of this tension was that both parties strongly identified with the project and saw their reputation on the line. The result was a cautious and not so cautious dance between the two project managers to make sure that every voice was heard while asserting their own point of view.

The best example of this initial struggle about who was in charge, was the scoping process at the beginning where a shared definition of the actual scope of the project was to be established: what the project was really about and what was to be part of or outside of the focus of the project. The re-scoping of an initial project definition described in a 'Request for Proposal' (RFP) is common practice among many consultancies (Chang and Lipson 2008). Going through the RFP we investigate how the goals of a project fit into a wider context and often find it necessary to challenge the existing view of the company by redefining what the most relevant problems should be. Yet whereas the level of re-scoping in many projects is decided upon mainly during the initial kick-off meeting, in this case the process took longer and was more intense. We met surprisingly strong resistance from the client against our suggested approach. While the initial project definition had its focus on the interaction between retailer and hearing aid patient, we, the consultants, suggested a somewhat broader focus to also understand the context of this interaction. But the client was afraid to lose specificity of the results with such a wide research scope. For a while we felt out of step with each other and the scoping process took much longer than expected as both parties felt equally in charge. In this as in other cases, visual models, for example of the overall research scope of the project, often became the best way of establishing a common ground linking our different understandings and thus enabling agreement. The model helped, for instance, to define what we meant by context and that both parties agreed on the core question.

Expertise And Cultural Tensions: How Do We Create A Common Language?

It can lead to uncertainty and frustration when people with uneven levels of experience and expertise in a particular method work together in a team. In our case it required some time and effort to work productively with team members who were not trained ethnographers and had limited research experience (the project manager was the only one with qualitative research experience). Involving non-ethnographers in all aspects of the project created tension points especially during times of high production pressure. Both sides struggled in their own ways with the tension between learning/teaching and working productively as a team. For the client it was at times disappointing or irritating when they felt that the consultants revised or even redid their work. From the consultants point of view it was hard to both teach their new team members and at the same time meet critical deadlines.

Yet it is also important to understand the cultural differences of the two organizations involved: the ethnographic consultancy on the one hand and the client with a strong engineering backbone on the other. Anyone with experience in qualitative research knows that analysis is rarely a straightforward process where every single step can be planned and executed according to specifications. Rather it is a messy world of interpretations, of going back and forth, up and down, and in and out of the material. For members of an engineering culture the level of uncertainty that especially ethnographic projects entail turned out to be rather confusing (Forsythe 1993) and the fact not every step was systematically defined made some uncomfortable.

One example was the documentation of fieldwork. As professionals we are used to putting our immediate impressions on paper, writing thick descriptions and increasing the authenticity of our accounts by hopefully creating meaning as we write. However, we are not always clear or able to explain about how we actually deploy words and construct our sentences in that manner (Lassiter 2005). When asked by our non-trained colleagues what to focus on when writing fieldnotes our immediate response was to focus on "everything" – a response that did little to help them. Although we produce an elaborate fieldwork guide with detailed questions and guidelines on how to interview and observe when in the field, the non-ethnographers still were terrified by the uncertainty regarding where to focus their attention and how to select what to document.

The Dance – How To Be Close While Keeping The Distance?

Probably the biggest challenge for both parties revolved around the level of participation in decision-making and in setting the directions for the project, in particular with regard to data analysis and development of recommendation and concepts. As we explained earlier the original intent was to have client and consultants share as many activities as possible and involve them equally in the project's direction and results. Yet this was harder to realize than anticipated and resulted in different types of frustration for clients and consultants. One story from the project may illustrate how this tension played out.

After field research had been conducted and the initial coding of videos had started our team went into Christmas break with the plan to continue the work in January. Yet, due to a sudden and unforeseen opportunity for an executive level meeting right after the break, the client owner of the project asked two members of the consultant team to prepare a presentation over Christmas that should also include a first cut on insights from the research. Although insights analysis had not started, this forced the consultants to come up with preliminary insights on their own, in order to not let pass the opportunity for feedback from the client executive. While the results were ad hoc and preliminary they did feel to the consultants like a reasonable first step towards pattern analysis and insight finding. In January, however, when the full team met for the first time after the break, the existence of this presentation with alleged insights generated a small uproar from the client team. One client explains: “After Christmas everybody came back and thought we should start analyzing the data. However, at that time some of the consultants had already done some of the work because they were asked to give a presentation for an executive. After the consultant team had shown the presentation some of us felt that something was being imposed on them.” For the client it felt almost like betrayal: breaking the mutual agreement to develop things together. The client team members felt left out and robbed of the opportunity to do their part in the project and to learn how to do insight analysis.

Due to these complaints the preliminary insights developed over Christmas were left untouched in the subsequent process, and the team started more or less from scratch developing insights in the proper collective manner. For the consultants this was a less than perfect outcome, as it felt like going backwards at a time of tight deadlines.

A similar situation arose towards the end of the project. Feeling the pressure of the final deadline the consultants wanted to break down the workload into separate work streams for client and consultant teams. This again created tensions since the client felt not close enough to the development of part of the recommendations. At the same time the consultants were concerned that working collectively on all tasks would slow down the process and pushed their plan through. While this division of labor worked well in terms of efficiency, it had problematic consequences as the client team did not feel the same degree of ownership over these recommendations and did not become effective spokespersons for them.

There were more situations where we consultants were tempted to escape briefly from the panopticon of the embedded team to work in the way we wanted and without witnesses. Sometimes we gave in to that desire but more often we did not.

UNDERSTANDING THE UNDERLYING DYNAMIC

Some of these conflicts and frustrations are easy to understand and their causes obvious. It is not surprising, for examples, that uneven skill levels and unaligned expectations may lead to conflicts. Nor is it unexpected that different professional cultures may cause friction when people work together in teams – although it may still be hard to predict where and how trouble would occur. Yet some of the consultant reactions in the last examples invite further explanation. What was really behind the desire for separation?

The Rhythm Of Emic And Etic

It was only at the end of the project that we, the consultants, started to make sense of the nature of the tension we had experienced. It was a conflict between two opposing needs: the need for an external position away from the client and for a position close to the client – both equally legitimate and necessary. Like ethnographers, consultants gain from the tension between inside and outside and need to shift between both positions to make their contribution valid. For ethnographers this is the well-known dialectic between emic and etic, between thinking from the perspective of the members of the culture they study and taking an outside perspective, for example that of professional anthropologists, social theorists or members of Western culture more generally. Only in combination may the perspectives yield profound insights.

For consultants there is a similar balancing act, in this case between thinking from the perspective of the client on the one hand and taking an outsider stance from which the client perspective can be challenged on the other. The position of traditional consultants is the client-etic, outsiders looking in. In the best case external consultants present the perspective of Schutz' stranger who, with a different worldview than the field she enters, serves as interpreter of cultural patterns (Schutz 1944). Ethnographers are especially equipped to also take a client-emic perspective, seeing things from the perspective of the client. Ethnographic collaboration in a close team ensures higher levels of ownership on the client side by opening the work process to their voices and perspectives.

As we had to learn during this project, the movement between ethnographer on the one side and consultant on the other, between insider and outsider, resembles a delicate dance. If the proper balance is kept and the rhythm works, the tension is productive. If pushed too far in one direction, the process starts to feel out-of-sync, unproductive and constraining. Going too client-etic, the client perspective may not be adequately included and insights remain foreign. Going too far in the client-emic direction carries the risk of losing the fresh outsider perspective and therefore the ability to think differently and challenge the client, taking away their opportunity to learn something new. In our case the aspiration of constant collaboration and sharing tended to deprive the consultants from their ability to step back and claim a necessary client-etic distance, if only for some moments.

Magic Without The Curtain – How To Advise And Analyse?

In addition to the challenges of finding the proper rhythm between distance and closeness, there was another reason for tensions to emerge from the close collaboration between client and consultants. Like the emic/etic dialectic we did not fully appreciate it during the project. To put it simply, only afterwards we came to realize that an important part of the self-understanding as consultants was doing magic, and that it required some kind of curtains.

One of the unwritten rules in our consultancy is that client time is professional time: we should strive to perform our very best and to always act according to professional standards in the presence of a client. Moreover, it appears that the reputation and professional self-understanding of consultants more generally rests to some degree on the ability to perform a kind of 'magic' – to appear with a bunch of slides presenting a neat segmentation, surprising insights or unexpected concepts. These 'we-never-thought-about-that-but-now-that-you-said-it-it-seems-so-obvious' types of insights appear simple but actually rely on hard work. It is a type of hard work that better takes place backstage because it can be messy and confusing and requires several attempts before persuasive clarity is reached.[7] Yet beyond the quality of insights and solutions the reputation of being good consultants seems to be strengthened by the way in which such sharp analysis and concise concepts are put forward in a gesture of revelation – similar to the unveiling of a new car design where the success and the 'Wow!' from the audience at least to some degree lies in the moment of surprise. Traditionally such magicians' work takes place behind curtains or in the dark, in order to have the insights shine even brighter once they are exposed to the eyes of the audience and in order to not reveal all the tricks of the trade while the show is going on. Like sausages and scientific facts, business solutions are best enjoyed with the traces of their production removed in the moment of consumption. (Latour 1987)

In this project, perhaps the greatest challenge for us was the lack of opportunities to perform such analytical or problem solving magic. In a close collaborative team there are no curtains and the tricks have to be conducted in full daylight standing in the middle of the audience, or more precisely by having the audience help with the tricks. The outcome may be brilliant work but will not elicit the same 'Wow' and will not feel like magic. At least this is how we as consultants often felt during this project. Thus we tried from time to time to sneak away in order to perhaps perform some magic after all. Yet for the client our sometimes haphazard attempts to briefly step behind the curtain were interpreted differently – as distancing or being "too deadline-focused", as self-serving, or even as betrayal. If doing magic is an important part of the professional identity of consultants, the question is how much entanglement is necessary in a collaborative project to ensure client impact and ownership. Being perceived as self-centered is certainly the worst thing one can do if building a trusting relationships with clients is the goal (Maister et. al 2001).

CONCLUSION – LESSONS TO LEARN

7 We had clients explicitly mention that they expect magic from us: unexpected and brilliant insights and solutions that they themselves have not been able to come up with – after all, why would they have hired us otherwise, they said, obvious ideas they could come up by themselves.

This paper focused on the challenges involved in finding the right rhythm for a close collaboration between client and consultant. We reported on the case of a highly embedded project team intended to involve clients more than usualin insight analysis and development of recommendations to achieve more relevant insights and higher impact at a time of economic uncertainty. We laid out that although highly beneficial overall , this approach also generated some tensions and frustrations for both clients and consultants. We highlighted three critical challenges and their underlying dynamics in order to illuminate potential implications for future close client-consultant encounters. The challenge of aligning expectations and clarifying roles, the challenge of cultural differences and confusion over ethnographic methods, and the challenge of finding the right rhythm between close interaction and useful separation, between client-emic perspectives and the desire to perform magic. Focusing on these challenging situations we can now sketch a few lessons for ethnographers and clients alike who engage in similar forms of interactions.

First, and not surprisingly, in a highly collaborative format expectations and roles need to be clearly communicated, aligned and defined, initially and throughout the project. It is essential to clarify who makes the final decisions and to ensure a mutual understanding of whether or not clients should participate in and decide upon all aspects of the process. While shared responsibility will guarantee necessary discussions, ultimate decision making power should probably rest with one party only.

Second, clients cannot become ethnographers over night and will require training and coaching for the steps they take part in. It is also important to not underestimate the different cultural dispositions between ethnographic consultants and clients. Consultants need to make their processes very explicit as clients need to know at each step where they are, what the goals are, and what is expected from them. In addition, interpretive analysis can be a scary and confusing experience for non-ethnographers if that territory is not domesticated for them. Moreover, in a situation were client and consultant team members use language differently while arguing for their positions, tangible tools and models can prove to be valuable means for creating a shared platform of understanding. This also means that embedded client-consultant teams require additional resources to train team members, define and communicate the process and have time to discuss the approach and results.

Third, despite the valuable goals to share as much as possible during such a project, from research to analysis and concept development, for consultants it is of great importance to take some time away to find the right rhythm between closeness and distance, client-etic and client-emic perspectives. Both states have value and are important for building a productive relationship. Thus clients need to recognize that external consultants are valuable in part because they have an outside perspective and can help the organization see things differently. However, it is similarly important to invite our clients into the secrets of our seemingly magic production in order to anchor our work. For the client it is important "to be together [with consultants] the whole way" – and that the consultancy "acknowledges that when they are gone the project members are going to be responsible for the future presentation of the results”. By teaching the client the ethnographic and consulting tricks, we can show them the real value of ethnographic encounters. Brilliant insights that are not understood and therefore untouchable are like expensive pieces of jewelry that cannot be worn in public. The challenge lies in finding the right rhythm and proper balance between working together and thinking separately in order to be able to both advise and analyse.

Anthropology is traditionally about making sense of other people's worlds. Anthropologists and ethnographers have long-established and fine-tuned methods and theories for uncovering people's practices and tacit assumptions. For us it became evident that there is a need for applying our methods more intensely towards making sense of our own worlds and the work we do, to analyse our work interactions with clients and our professional assumptions and values. (Hylland-Eriksen 2006) If anthropology is a tool for cultural critique this includes the critical reflection of the culture of ethnographic consultants. (Markus et al. 1996) In the last decade ethnographic consulting practice has developed intricate processes to conduct relevant user research, perform deep analysis and develop innovative strategies and concepts. In difficult times with demands for a stronger client focus, we need to make sure that our processes and structures to understand our clients and ourselves and work collaboratively with them are at least as developed.

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The de-skilling of ethnographic labor: signs of an emerging predicament

GERALD LOMBARDI
Hall & Partners

An oft-stated rule in design and engineering is, "Good, fast, cheap: pick two". The success of ethnography in business has forced this rule into action with a vengeance. As a result, ethnographers now face a threat experienced by many categories of worker over the past two centuries: job de-skilling. Some mechanisms of de-skilling in business-world ethnography are reviewed, including:

- *simplifications that invert the conventional depth-vs.-breadth balance of ethnographic knowledge;*
- *standardizations that permit research to be distributed among workers of varying cost;*
- *the rise of ethnographic piecework suppliers who rely on pools of underemployed social scientists.*

I argue that pressures leading in this direction must be contested, and that only by altering the cost-time-quality paradigm that controls our work can we restore its value to our employers and clients.

Manufactures prosper most where the mind is least consulted, and where the workshop may, without any great effort of imagination, be considered an engine, the parts of which are men…. and thinking itself, in this age of separations, may become a peculiar craft.
Adam Ferguson, *An Essay on the History of Civil Society: 327,330.*

THE PROBLEM

Each of us at this conference is living proof that the demand for ethnographic knowledge is at an all-time high. From the many backgrounds that we represent, the knowledge we generate is being disseminated across ever-wider fields of activity. That is a good thing. But increased demand exerts a powerful force, tending to transform any production resource into a commodity. That force applies even when the resource in question is an intangible one like knowledge. This in turn has serious implications for the way we do our work, and my talk today will review some warning signs of a particular problem known to labor economists as de-skilling.

For a long time, the status of ethnographic labor in the business world benefited from the relative naïveté of many of our clients, which allowed us to behave like artisans with secret skills—like a pre-capitalist European guild or a traditional craft union at the peak of the industrial age. Our work was rooted in our professional traditions, passed on through various kinds of apprenticeship, and was essentially under our direct control. But as more businesses want more of what we offer, they need to more tightly integrate us with the control systems that underpin all modern companies. Our work needs to be more predictable, more standardized, have tighter linkage to ROI, faster throughput, and quicker turnaround. One client put it to me this way: "How can I get 80% of the value of a full-blown ethnographic study, for 60% of the cost, in about half the time?"

Those numbers tell a familiar story. In fact, most of business history can be summarized in that one sentence. Companies must continually ratchet up their resource efficiency or they will lose the game. When the resource in question is people—us, in this case—I have observed that there are three strategies for achieving this:

1. Increase the number of workers, which may include simplifying the definition of a qualified worker to make it easier to be one — in other words, expand the labor pool.
2. Require workers to work longer and/or faster for the same amount of money — speed up the labor pool.
3. Increase efficiency by transforming an "artisanal" and self-directed work process into a fully rationalized one — de-skill the labor pool.

Option one is not something the business world has much control over yet, although it constantly tries by accepting the vaguest possible definition of what the work consists of and who can or should do it. Option two is self-explanatory: I suspect all of us have had to work longer hours and more intensively in recent years, without always seeing our salaries go up correspondingly. Option three is a bit more complicated, and it is what I want to focus on with examples from my own experience.

But first, a definition of de-skilling. Here's how to de-skill any job: First, you break it down into pieces, and parcel those pieces out among multiple actors who get paid variable rates based on the minimum expertise needed to do their part. Then you remove human autonomy and variability by making people work according to standard routines. To the degree possible, you take the humans out altogether and replace them with machines (of the hard or soft variety). If you can extract the creative mental elements from the job and turn them into private property, you do that too.

Despite my alarmist description, de-skilling can be beneficial. By embedding human knowledge into machines and routines, de-skilling allows its opposite, namely re-skilling. People can concentrate on higher-order activities and leave the boring work to the robots. But at the same time it usually has negative impact on the people most directly affected. For one thing, average wages go down. For another, people tend to lose their workplace autonomy—how they do what they do, and how they relate to their co-workers who may be doing some other portion of the work. As usual, Marx has an appropriate *bon mot:* "In order to make the collective laborer, and through him capital, rich in social productive power, each laborer must be made poor in individual productive powers" (Marx 1967 [1887]: 361). In factories, the enforcer of this regime may be a time and motion specialist who determines the optimal sequence of steps for a job. There still are such people, and there's a steady business in time and motion analysis software. For business ethnographers, it is done by a more subtle set of forces intrinsic to the way the global economy works, and for the most part we do it to ourselves.

DE-SKILLING AS A BUSINESS MODEL

A few years ago, together with two colleagues at a leading market research company, I helped create a product called HomeView®, in which a database of ten thousand photographs of domestic interiors in twelve countries was linked to a global consumer survey. It was designed as an open-ended creative tool for generating connections and hypotheses, a hybrid device that blended some of the benefits of qualitative material culture research with the rigor and certitude of quantitative studies. To work as intended, we had to first analyze the contents of all ten thousand images, making judgments about things like people's propensity to create collections of objects, or the degree of intentionality in how their spaces are decorated, or the presence of a "node" where activities intersect, and then tagging those judgments as meta-data. Complexly interrelated criteria for the analysis of material culture had to become multiple choice entries in a coding interface.

Coding each photo took at least ten minutes, if you worked fast and somewhat unthinkingly. Ten minutes times ten thousand is sixteen hundred and sixty-six hours, so to be cost effective, we planned to send the job to our company's outsourcing partner in India, where it would be done by general-purpose research workers paid far less than my colleagues and me, and minimally trained to produce fairly consistent interpretations (we hoped) of what the photos were telling them about hundreds of brands and products *in situ*.

Set aside for a moment the interesting epistemological questions this raises. From a purely labor standpoint, what is happening? Let's go back to that checklist of prerequisites for job de-skilling:

- Break the job down into pieces: check.
- Parcel the pieces out among variably paid actors, ensuring the cheapest possible worker is doing each task: check.
- Transfer parts of human activity to a machine system: check.
- Extract the creative mental elements and privatize them: check.

Numerous tools exist to codify and organize visual material for ethnographic analysis. What is different here is that, to my knowledge, HomeView® was the first such tool to be predicated on de-skilling the labor that produced its value. This was an unavoidable outcome of our need to give it a viable business model in addition to just making it functional. Part of the traditional skill of analyzing visual culture becomes a piece of clever software, a number of people wind up with the fairly low-paid, stressful and mind-numbing task of being image coders—with unpredictable levels of accuracy along the way—and a small number of us are thereby granted the opportunity to concentrate on higher-order analytic activities.

One of my main worries is the implication this has for creating a multi-tiered labor force with permanently asymmetrical access to money and opportunities. But even for those who don't care about that issue, there is reason for concern in terms of the covert stultifying effects that such a labor regime can have on the enterprise. Arguably, a key contribution of ethnographers in industry is that they create the conditions for corporate learning. That is a goal that most companies at least pay lip service to, often explicitly. But in a study of why corporations fail, University of Southern California business professor Jonathan Klein took aim at job de-skilling, warning that it

> in many respects mimics rather than applies the learning process. In it purest sense, learning provides a new, expanded way of looking at old things. De-skilling is the reverse: it simply narrows the application of current skills…. Hence, de-skilling undermines the very efficiency for which it is intended (Klein 2000: 78, 80).

You can surmise why this is so in the case of HomeView®: once it was congealed into software and a set of database entries, this body of knowledge and its mode of interpretation become more resistant to evolution and revision, as well as to contestation and dispute. The novel connections we envisioned would be at least partly offset over the long term—undermined, in Klein's words—by the distortion of workers' relationship to the information they are manipulating in their various ways. The fixed role of the image coders, and their structural position as outsourced contractors, places unknowable constraints on the output of their work, and leaves them in no position to ever "get in front of" the data as its masters. Meanwhile, the hopefully masterful role of the ethnographic analysts back at the home office is mediated through the work already done by those coders, again with unknowable effects. The decision to use a de-skilling strategy thus places in question the organization's ability to maximize the payoff of its new tool, even though at first sight that strategy may have looked like money in the bank.

ETHNOGRAPHIC PIECEWORK

Here is another example from a different angle. Historically, after artisanal production is de-skilled, certain tasks are replaced by piecework—people get paid per unit of output regardless of how much time they have to spend on it. In corporate ethnography, a small number of piecework brokers have come into existence as hiring halls for the reserve corps of under-employed social science grad students and excess Ph.D.s. What they do is different in kind from the fixed-fee arrangements that are common for many practicing ethnographers, as the unit of production in piecework is no longer the entire project but a tiny sub-unit of it. I have been on both sides of the piecework system—as buyer and seller—and have learned how it contributes to the de-skilling of labor even while it provides for cost-effective production of a certain type of information. Field researchers in this system receive a fixed fee for a specified number of home visits, observations, or whatever their task may be, suitably recorded in standardized templates. They rarely find out who the client is or what their goals are, and often don't get to see the final results: they are alienated from the context of their work and restricted to knowing only a minor piece of the process. In their modest corner of each project, if they spend the time it really takes, they often wind up earning a fairly low hourly wage. In other words, by doing their job well, they lower its time value. Their choice is between being a "good" researcher and being a "well-paid" researcher. It becomes hard to have it both ways, because the piece-rates are generally set with an eye on creating the most attractive budget for the client.

At the same time, the reporting templates—the bridge from data to interpretation—are essentially textual machines that shape data into uniform ethnographic propositions. Like the coding software for those ten thousand photographs mentioned earlier, ethnographic piecework templates always exemplify what Marxian economists call "dead labor", which is found wherever the source of value has been removed from people and transferred into artifacts which embody the accumulated but now-static creative ability of previous generations of workers. With dead labor in a key position in the value chain, value is generated faster and more predictably, but the amount of it that is contributed by the living worker decreases to the extent that the amount attributable to the machinery increases. So ethnographic piecework not only intensifies the fragmentation of the work process but also reduces the relative contribution of the researcher—and thus provides continual justification for lowering piece-wages. Once this becomes possible it becomes probable, given the cost-driven logic of labor allocation decisions. An example of what can happen, from a different industry, is the 2008 reduction in pageview payments by Gawker Media's owners to its freelance writers (Avent 2008, Golson 2008). Pageview payments are an Internet version of a piecework system, and the ease with which such payments can be calibrated so as to force ever-greater effort for the same amount of money provides a foretaste of what ethnographic workers might encounter in the near future.

DON'T MAKE ME THINK

Piecework is just one dimension of the simultaneous rationalization and simplification of our work that I am sure we have all noticed, as we ratchet down our definition of what we are doing so it matches the level of complexity that our clients are ready to absorb. We are de-skilling ourselves. For those who have studied de-skilling in other contexts, this comes as no surprise. Production methods and production outputs co-evolve. Gene Rochlin, a physicist who writes about automation, summed it up in his analysis of factory production in the 20th century:

> In the classic mass-production plant, increased production was achieved not only by dividing and specializing tasks, but by

> preprocessing away into the mechanisms of control much of the information contained in the final products…. items to be manufactured were therefore increasingly selected, and designed, according to the ease with which they could be subjected to the new techniques of mass production (Rochlin 1997: ch.4, paragraph 18).

If we consider ethnographic praxis in industry to be the manufacture of ethnographic knowledge, then the analogy holds. When the logic of business requires us to do our work ever-faster and ever-cheaper, that justifies calibrating the goals of the research so they are the goals most readily produced by the fastest, cheapest methods. Many of us have observed that we can't always do the kind of work we think the situation calls for: what we are noticing is the tandem downshifting of our work processes and the type of information our clients are capable of desiring, given their constraints.

Techniques for mass-producing ethnographic knowledge include things like HomeView® and the piecework system. The goal of de-skilled information production is also aided by disintermediating technologies that create a simulacrum of identity with the consumer's point of view. The benefit here is that data interpretation—a bulwark of ethnographic craft skill—becomes apparently unnecessary. An example is the spy-camera eyeglasses that a French market research firm uses in one of its proprietary methods (PLM Marketing n.d.). With a video camera hidden in the nose-piece, the glasses allow one to experience the wearer's visual reality, remotely and in real time. Put the glasses on a selected consumer, and a new kind of armchair ethnography becomes possible—a return to the discipline's 19th century roots, but now shaped by the needs of harried business managers. It's time-consuming and costly to let ethnographers analyze ethnographic data that have already taken a long time to collect. No wonder clients prefer to "be constantly wading ankle-deep in data", as my colleague Simon Pulman-Jones once expressed it to me. The immediacy of direct experience substitutes nicely for the unacceptable time-sink of analysis. Thus, instead of helping clients interpret complex data about complex situations, I am increasingly asked to produce an experience of getting to know consumers and end-users on a pre-analytic level that looks and feels new, but which must, for reasons of business efficiency, dovetail as much as possible with existing ways of conceptualizing those consumers.

One can think of this as the postmodern condition coming back to haunt us in a perverse way. Recall Lyotard's keywords from his 1979 report on knowledge: "I define postmodern as incredulity towards metanarratives....The grand narrative has lost its credibility.... Where, after the metanarratives, can legitimacy reside?" (Lyotard 1984: xxv, 37). Analysis produces metanarratives, and the fact is, some clients are not very interested in my ethnological metanarratives anymore. It may be for lack of time or lack of perceived relevance, or both, but clients can be thoroughly postmodern in Lyotard's sense. I would speculate that corporate pressure toward a de-skilled ethnographic workforce comes as much from this as from the financial considerations. Together, the two are synergistic and mutually justifying.

WHAT IS TO BE DONE?

I have briefly described some evidence that the commodities called "ethnographic labor" and "ethnographic knowledge" are in such high demand that the business world would have us stretch them to, and beyond, the limits of efficiency. I focused on the strategy of labor de-skilling, and suggested that this results logically from actions that align our work with business imperatives. I also observed that while de-skilling is a normal way business evolves, it is not always good for those who do the work, because it forces down the market value of their labor, distorts the flow of knowledge, and alters work practices in a self-reinforcing symbiosis with the demand for mass-produceable output.
The anecdotes that illustrated my points are rare occurrences at present, but they are not random occurrences. If history is a guide, they are early signs of a process that is likely to intensify. At the final stage of that process, ethnographic praxis will be something other than what it is today. Ethnography transformed into a factory system will probably not be as rewarding for many of its practitioners, and possibly less valuable to the businesses we serve.

I'm sure we have all encountered and contemplated the meaning of the well-known design and engineering Project Triangle:

> Good, Fast, Cheap: pick two.

One way of summarizing the point of my discussion is to ask what is happening to "Good"? Here are a few questions to sharpen that point:

- Can ethnographers working in industry artificially restrict the ethnographic labor supply, as a way to boost its market value? If so, how, and will that give us a stronger platform for demanding improvements in the way we do our work?
- What happens to the emerging community of ethnographic workers when it is stratified by structures like outsourcing schemes and piecework systems, which enforce multi-tiered wages and differential access to information?
- What happens to ethnographic praxis when the only outputs that can be envisioned are ones that can be produced in a regime of fragmented and partially de-skilled work?

These are classic labor-management questions without a classic labor-management solution. In the community represented by the EPIC meetings, some people earn their livelihood by selling their ethnographic labor to others, some hire those ethnographic laborers, and some, like me, move back and forth between buying and selling ethnographic labor, or do both at the same time. That is just one of several factors that make it unproductive to say, "Okay let's organize the Ethnographic Workers of the World into one big union and start making demands on our employers". That would be easy compared to what we actually need to do. We might turn for guidance to someone like Lewis Mumford, the humanistic historian and critic who anticipated many current debates about work, technology and the environment. He argued that unless the quality of working life is explicitly addressed as an aspect of the production process, economic pressures will always force its degradation in countless ways (Mumford 1964, 1970). That is what is happening to us. Our mission is to help make goods and services that improve other people's lives. Ironically, the trend toward de-skilling promises to push our own lives in the opposite direction. So when I say let's restore a little more "Good" to the equation, I mean it with respect to the conditions of our own work as well as to the outputs we produce, which usually still manage to be worthwhile.

This means our work needs to take more time and cost more money. You may ask how I can be so naïve as to believe that we can convince our companies and clients of the wisdom of this position. But we have precedents for optimism. Certain business practices that are widely accepted today seemed almost laughable only a few years ago. Think of the tectonic shift toward bottom-of-the-pyramid consumer strategies. Think about recent corporate commitments to carbon neutrality, sustainability and the development of less harmful energy sources. What they have in common is that they recognize there are ultimate physical limits to growth, and that our global economy needs to evolve its way out of the expand-at-all-costs phase of its existence. Fast and Cheap without Good simply reveals the labor dimension of the trajectory that sends us straight toward that brick wall of inescapable limits.

Most of us think of ourselves as humanists. If we take our humanistic mission seriously, we need to insist that the principles we apply in our research should be turned around and applied to the conditions of our own labor. And when I say "our" labor, I mean all of us whose work touches on the ethnographic enterprise in any way. Otherwise, the work is not worth doing, and we should consider laying down our tools.

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Ethnographer Diasporas and Emergent Communities of Practice: the place for a 21st century ethics in business ethnography today

INGA TREITLER
Anthropology Imagination

FRANK ROMAGOSA
RAPP

A diaspora of practice appears to have formed over the last 20 years across institutions employing ethnographers. Ethnographers in industry, we learn through a series of guided conversations, reveal a sense of a practice poised to return to its too often occluded foundations as an ethical endeavor. The adaptive nature of our diasporic communities of practice is the ideal locus for developing communication modes and ethical dispositions that by returning us to our earliest roots allow us to respond to our new times of crisis, the downsizing of corporations, and the shrinking budgets for our work. In the same breath we find opportunities to open conversations with employers and clients about the place of products and consumption in a world in which BRIC (Brazil, Russia, India, and China) nations and Bottom of Pyramid economies stand to gain significant influence over the shape of business to come.

> Do no harm; communicate and collaborate; keep learning, keep teaching; instigate meaningful change; make theory action.
> Designers Accord code of conduct (designerscode.org)

> Exile "is a jealous state," on the one hand envious of the easy relations others may have to home and homelands, on the other jealously guarding the lucidities born of being away from home.
> Said 1990:360

INTRODUCTION

What kind of times are these we live and work in? Last October, many of us left the EPIC2008 meetings with a drive to apply "sustainability" thinking as a filter for research and design. It is no coincidence that those meetings were hosted in Copenhagen, a country, and a region where design is an unabashed element of all public decision making. But attendance at that meeting was lower than the number registered, as employers faced budget crises of all sorts given a few years' worth of unsustainable and indeed unethical financial and real estate sector decision making. The gruesome detail is all too familiar but the "sustainability" concept with its deep roots in environmentalism and ecosystem models of management has taken hold none too soon across the breadth of the design world with ever greater visibility, and somehow joined to a mandate for a more culturally relevant and personal sense of ethics that might allow us to return to the very roots of our disciplinary training.

Many of us engaged in research and design, whether designers or design researchers, have long felt a recurrent tension… a dilemma of sorts. The impulse that drives us to work is the desire to do good; to leave the earth better than we found it, to listen to, channel and respond to the voices of consumers and the public whose ideas we are "under contract" to represent. And yet we engage as we go in a form of "innovation-addiction" within design studios and consultancies, and in research and design departments within larger corporations. Innovation addiction too often yields an overgrowth and a proliferation that can not be managed for a healthy society and earth. As historian Daniel Boorstin noted thirty years ago "nothing can be uninvented" (*1987:311)*. Even in federally funded work in the U.S., our livelihood may rest on understanding the miseries of others without necessarily remedying them. And so we in the fields of innovation and design, as we face up to the "unarticulated needs" of the public, bear a certain responsibility to filter and screen that "need" and respond in honorable ways that sustain both ecosystems and economic systems. In this paper we explore how practitioners go about living up to that responsibility in various work places. Our thesis is that the premise of that work owes a debt to the knowledge building after a diasporic fashion among our peers and beyond the walls of our organizations.

To understand ourselves better as design researchers in industry, we recently launched a series of conversations with practitioners in our field, and came to think that indeed there is something about the way we have practiced since the collapse of the dot.com era that places us in a strong position to respond to the growing demand of the times to transform how business is done. We turn our attention to describing those ways of work and how today's ethical demands will cause us to revisit our origins as we build toward a future that is already here.

POST DOT.COM DESIGN ETHNOGRAPHY

These days – and going back say 20 years – work communities in the knowledge fields are not spatially bounded. There's nothing terribly new about that. Epistemological processes throughout history need colleagues and don't find them readily in delimited spaces. The existence of conferences such as EPIC is a tribute to that need. But the last two decades have seen an unprecedented turn-over in work-place employment. Layoffs are no longer automatically a sign of unmet expectations but might just as readily be a change in an employer's business model. We know that many firms that emerged during the information age, staffed by personnel released by deregulation in various industries, passed through phases of self-definition and as part of that process the decisions about what constituted a good employee/employer match were not that easy to make. So staff are brought in, say with PhDs under the pretext of bolstering the credibility and reputation of a firm, or with training in anthropology or cultural studies because clients have become enamored of the idea of culture as central to innovation. An understanding of culture (and how culture changes) is of course central to innovation practice – we are merely suggesting that too often culture less as an understanding than as a fetish is put before the practice of facilitating the process of creating what is new in the world.

Or consider design. Staff are recruited who can bolster a firm's design persona, ostensibly to identify and meet consumer need. But without clearly defined work culture in this emergent innovation field, the fit is often difficult, leading to more frequent reorganizations and the incumbent layoffs, especially during periods of financial distress. Not at all rare during those years of the early millennium one saw new graduates both at the MA and at PhD level released into the job market and the workplace without a clear story to tell, and with no recognizable portfolio of projects or internship experience. Consequently employers struggled to identify their possible contributions. Simply put, the language had not been developed. People were not "trained" for design research. The anticipation of employment in these arenas had to wait a full generation from the late 1990s until the present time. We can certainly find exceptions, as the late 1990s localizing link between the Illinois Institute of Technology's Institute of Design and the University of Chicago as feeder programs (in a sense) to the Doblin Group, and later E-Bay and Sapient – so Chicago-based or with a Chicago office. That collaboration and feeder relationship is not dissimilar to the National Laboratory network in the U.S. in which each laboratory is partnered institutionally or by geographic circumstance with a major university.

The rapid turn over of staff both in emerging consultancies and major corporations has had implications for the way knowledge is built. Call it the ethnographer diaspora. Diasporas create a continual renewal for those who have left their intellectual and professional moorings and "homelands." That renewal and non-spatial boundedness lifts the culture of research and practice above the organization and above the academic departments into the spaces between and among individuals—both researcher and employer. Ethnographers today leave their jobs and go to new ones with greater frequency and more systematically than ever before. What we are all doing is following the market. One could say our discipline itself has a career.. And that career responds to the politics and economics of our times.

DIASPORA CHARACTERISTICS AND THEIR VALUE

The origins of the term diaspora are found in the Greek διασπορά - "a scattering or sowing of seeds." The imagery in that original term is poetic, letting us focus more on the organic processes of growth and the spread of culture than on the forcible exile brought on the wages of history which at times have been horrific. But both elements are there in the current understanding of a diaspora. The extension of the term in history has attached, as cause of that "casting," the connotations of exile and resettlement, forced by expulsion, slavery, racism, war, and the numerous other hardships that can plague a previously geographically grounded people. Accruing to the term because of the history of the Jewish people as written in the Torah, and later exiled groups throughout history, is the complex and evolving identity, and the perpetual longing to return. What's in that is the desire to recreate community away from home, and the perpetual self policing intended to ensure authenticity of self and others and the right to claim membership in the "tribe." As a manifestation of these processes in the life of EPIC, previous lectures, workshops, artifacts and hallway conversation explored and challenged the "right to belong," recognition of a shared ancestry, common kinship, and canons of ethics. Indeed to illustrate the parallels between the famous diasporas throughout history, and the diasporas of practice in design research, which includes no small contribution from anthropology, we can mention that as we write these words there is an ongoing conversation within the American Anthropological Association (Treitler 2007 and 2008) and being played out on the pages of the monthly Anthropology Newsletter that poses these very questions… who has a right to practice?, in what contexts?, by what means?, and to what ends?.

What is the survival value to our practice in the operation of a diaspora as our community of practice? And how does it create space for a twenty-first century business ethics? To respond to our own question, we begin with the journalistic promise of "full disclosure." It bears no small relevance that both authors owe their particular sensitivity (shall we say bias?) to their own place in ethnic diasporas of displaced peoples within their own generation. And perhaps as a product of that sensitivity both of us have reveled in dissertation research within Caribbean diasporas around the world. The power of the diaspora model is thus palpable to us both through our personal histories. And it leads us to a deep awareness of the place of ethics in our practice, and the responsibility we bear toward those who participate in our research. Though our research participants do not have to be under-served, marginalized, disempowered, we researchers and practitioners have a natural eye to identify what business might be prone to overlook. And, as we've discovered in conversations with colleagues in preparation for this paper, that sensibility is a common trait that draws many of us into the work we do here. So as our profession continues to spread, gather, and accumulate the influences of our multiple engagements in the last decade, it is understandable that we continue refreshing our sense of ethical practice of ethnography in business even as we immerse ourselves in a culture drunk with addiction to innovation. Our membership in a diaspora causes us to police ourselves and each other to maintain a standard and continually to refine our methods and to find new places we can do good, given that is the impulse that we all share… our core identity, as expressed in the opening paragraph.

DIASPORAS IN THE NEW MILLENNIUM

The movement of people and ideas through diasporas is a function of our times— a peculiarity of the turn of the millennium compounded by the disorientation and effects of globalization—boundaries are redefined and shifting the very possibilities of belonging. And diaspora appears to be a fruitful metaphor throughout popular culture for capturing that modern striving. A quick Wikepedia review locates four occurrences under the name *"diaspora:"* a science fiction novel; a Star Trek inspired massively multiplayer online roleplaying game, and two rock songs … not to mention the rich intellectual history that has exploded in the turn of the millennium with the no fewer than ten journals dedicated to diaspora studies of peoples from all points on the globe.

The dot.com era was fascinating for the aura of seduction it created in the world of anthropological professionals and the way the "fertile verge" it nurtured brought together the social sciences and the engineering and design professions that our histories had kept apart. Who would not be enticed by the stories that were told in the daily news from the dawn of the Internet into the early millennium?! Conjured up were ways to "meet human need" by connecting an idea to a user… never mind that much of the conceptualization was air. And the word became reality as the public filled the spaces with money through the enactment of the Initial Public Offering (IPO). It was the madding crowds of ethnographers and designers who convened to manifest the ideas.

We were involved in exploring dimensions of human behavior in the face of things that didn't quite exist… we were trying to think futuristically and predictively, in an anticipatory fashion. We knew how to observe human behavior, and we were progressively shifting our focus to think about behavior that didn't exist and to do that we invented new realms of research and design. The ethics of the two naturally conflicted; observers were intended to be unobtrusive and non-interventionist, and meanwhile the designers were making things intended to meet an "unarticulated" and "unrecognized" need.

WHAT IS ETHICS? IS IT A "FEELING"? IS IT A CANON?

The historic conditions leading up to our present era in which ethnography permeates the corporate world are common knowledge by now. We talked with ethnographers, designers, and planners about how through a combination of passions and serendipitous life circumstances they wound up where they are today. What we wanted to learn from them was not so much what their training was, because it was clear early on that few of us in fact arrived at the jobs we now hold as a simple correlate of training. We wanted to learn, rather, how people found their way, and what they carried with them as they moved from one post to another; and what place a notion of ethical practice held for them along that road.

Here's what we found. First and foremost we found people wanting to make a difference. That was stated in a variety of ways, but usually with the apology that it was naïve, trite, or even a bit Pollyanna-ish. We found people wanting to be based in community not building a life around a job. We found people moving into workplaces as compelled by the ethical stance of the corporation and its promise to do good. We found that they had tumbled serendipitously into a group of likeminded people and turned it into work. We found that they wanted to balance out life and work, finding synergy between the ethics and values in the two. And most concretely we heard they wanted to let consumers be heard by corporations. In short, they want to do good. And today when the dominant theme in the corporate world is its bankruptcy, and when research budgets are slashed before all else because companies can not afford to innovate, these impulses are being revisited.

For some, the route from a background in *some kind* of social science to the creative world is about stories and their travels. We spoke with someone who, with early anthropological training in an elite Russian University then traveled thousands of miles like a latter-day Boas to pursue a second advanced degree in California. If for this person an early and ongoing passion for the life and times of images of ethnicities has led to a career in the branding world, it has also secured a commitment to forestall how anthropology itself as a practice is hijacked in business today. "Europeans," he told us, "dress up as 'Indians,'' play 'Indians' and over time go so far as to adopt this lifestyle." This mimicry becomes cognitive dissonance – he believes the same is happening to anthropology today, people 'playing' at anthropology. Indeed we authors have recognized in recent decades that with the rise in attention of corporate America to the value of the consumer in speaking to the needs of design, ethnography is seen as a commodity to be sold to clients for a smarter answer to business.

We spoke with another colleague who came to this profession with an underlying passion for the visual (she had studied film) but told us this passion was brought to the fore *after* school when she "landed" (she told us) in a place where the challenge was to put visual thinking to everyday, collaborative, and tangible use. Whether this right place / right time was happenstance or had a deeper underlying sense, for our colleague this was on-going formation, the work space's exposed brick walls and all of its practice an essential site in her ongoing travels.

For many of the design ethnographers we spoke with, process over end-product bears a fundamental and valued ethic. The reasoning is that whereas a monetized product is the necessity of any capitalist organization, on the core ideals of the developers rest the future of all products. Process becomes generative, in the way grammar can be generative. It is that identification, surprising to many trained academically through the "ownership of ideas," that yielded the true innovation within our practice that knowledge is not the property of an individual; rather "ideas are moved forward with other people." The process of moving that idea forward creates opportunities for that idea to touch a multitude of people. And, we learned, in our conversations, if a client is touched by watching an ethnographer work, that constitutes a success and it is measured by the questions that client asks. In that space lies the opportunity for introducing novel notions; raising suggestions about the impact of a product on the consumer and the consuming community, the reach and communication through packaging and brand, and even the placement of a product in the market.

DIASPORAS AND TRAVELING CULTURES

All of the people with whom we spoke are travelers, not merely because they exhaust passports, nor even because they (might) have a shared repertoire of knowledge, but because they keep common stock in a certain disposition or way of being in the world, where process and narrative and A to Z and everything in between *does* matter. The folks we spoke with all have been parts of companies that have been new companies or the seeds of new companies. Many of the strategic design firms themselves served as incubators creating a common culture and in turn "seeding" new companies. In fact no fewer than five companies have been founded from E-Lab (later Sapient) and Doblin essences. In fact though not intentionally modeling their expansion on the diaspora model we've been using, Sapient used a business strategy that resonated. After buying E-Lab in the late 1990s, offices were expanded through a practice called "seeding." Practitioners move from one office to another carrying experience at the level of the ethic and culture of the central office in Chicago to the London office introducing a common practice of client management, outreach, and project design, as well as research methods, internal communications, and solutions. Similar dynamics took place in the founding of new companies by former E-Lab or Sapient staff.

No matter what the success of these *business* projects, there is a certain diasporic memory that remembers the kernel to imagine a future. Memory here is living and ongoing, a practice that sustains. And, unsurprisingly, a very basic guiding principle or core essence is a commitment to an ethical practice, something we heard repeatedly from our interlocutors.

ETHICS

Though ethics codes in anthropology and in design have only scant history of being formalized or codified, our discussion has made evident that the challenge of ethical practice constitutes the fiber of our practice. The roots of ethical work in anthropology can be traced back to its origins and it behooves us to honor those very briefly by way of illustration. Franz Boas, the father figure of anthropology, was a political and intellectual reformer. His ethical stance against the misuse of anthropological research in the name of espionage was legendary, a position for which he was sanctioned by the discipline. His sanction was only recently lifted but continues to fall under discussion to this day in the halls of anthropology and the discussions of Ethics Committees. But more profoundly at the beginning of American anthropological time, we all remember that Papa Franz left an imperial and anti-Semitic Prussia, geology degree in tow, to explore how Eskimo see color differently. For this, Boas offered us not the racialized explanation then current (and promulgated by a sociology we would not brook today), but culture. Eskimo, he taught us as he founded a discipline, see and know color as different categories. Assigning this then still developing sense of a thing called culture, the explanatory burden was certainly innovative, and surely an ethical practice. These findings had a long career, forming part of the litigant brief in Brown v. Board of Education, some fifty years later.

Claude Lévi-Strauss, who for his part has framed the thinking of many generations of social scientists who followed him, bears a continual concern for the human condition as noted through his contributions to the United Nations Educational, Scientific and Cultural Organization (Lévi-Strauss,1952)

> The true contribution of a culture consists, not in the list of inventions which it has personally produced, but in its difference from others. The sense of gratitude and respect which each single member of a given

> culture can and should feel towards all others can only be based on the conviction that the other cultures differ from his own in countless ways.

Lévi-Strauss's is perhaps a different, but certainly an originary, applied anthropology.

If the first half of the anthropology's past century was about understanding how humans inhabit the world, its close filiations with design should be apparent. A half-century after Lévi-Strauss' UNESCO turns; the publication of a Designer's Accord in 2007 was inspired by an article that stressed the ethics of sustainable design. The accord comes with a simple code of conduct to be adopted (though not enforced) by practitioners in their client engagements (designerscode.org):

> Do no harm; communicate and collaborate; keep learning, keep teaching; instigate meaningful change; make theory action.

What's at stake in observational research is the practice itself. Merging these multiple frames of ethics is what has advanced the possibilities to introduce and influence new ways of doing business in this chaotic time of upheaval. Emphasis on the need to share is in fact a return to roots.

In conversations with our colleagues and ourselves the following concrete manifestations of the ethics goals were expressed by more than one person:

1. Be responsible to the client and to the participant—letting the participant be heard is as much part of the contract as the $150 incentive. Bear the full expression of the participant to the client.

2. Reconcile diverse interests. For example, what happens when a new IT desk is staffed with fewer people?

3. Share findings.

4. Do no harm—take what you have, e.g., a corporation that must sell products in order to survive, and follow through to positive advantage.

5. Frame response to Requests for Proposal (RFPs) using your own moral/ethical compass.

6. Impact others who are touched by the project (evaluate success by the way others ask questions).

7. Ethical practice lies in process and influence not in solutions. "Ethics is a practice of living." Corporate top values are manifest throughout an organization. Treating

the consumer as one would treat an employee… dissatisfaction on the part of the consumer is addressed through research and redressed through localized design.

8. Ethical practice is about "discovering from people." It is the process of discovery that reveals an ethical compass and that is not possible when the complexity of ethnographic methods collapses.

ETHICS IN A TIME OF ACCELERATION

If anthropology has long been concerned with a changing world as the basis of its ethical practice, anthropology also has long taken a keen interest in *observing* and *documenting* that changing world. Before Levi-Strauss took an adamant interest in writing about what he called out as cultures in entropy, Radcliffe-Brown noted from a plane over Eastern Africa what he called "teeming" masses of people in motion. Almost a century later, we note how money travels and at times even teems. This is a world still betwixt and between, when the great bank holding company Goldman Sachs – founded in the Lower East Village in New York City in 1869 – predicts that by 2025 the gross domestic product of the 4 BRIC countries[8] could be half of what the G6 produces. By 2040, it will have surpassed it.

Recognition of the power of the "Bottom of the Pyramid," those 4 billion people who earn less that $2 a day began 75 years ago, in the dark days leading to the world's last great depression. Franklin Delano Roosevelt tells us in a 1932 radio address called *The Forgotten Man* that "these unhappy times call for the building of plans that rest upon the forgotten, the unorganized but the indispensable units of economic power ... that build from the bottom up and not from the top down, that put their faith once more in the forgotten man at the bottom of the economic pyramid."

What has changed? Technology, to be sure, joins us ever more closely, as FDRs Forgotten Man is increasingly a productive and possibly self-sustaining person, via such new technologies of economy like micro-credit, or "e-Choupals," electronic village squares in India that make agriculture much more responsive to market conditions. Not to sound too much a just-so platitude, anthropology in business today needs to observe not merely the wonder of a changing world, but the kinds of moral value propositions that this changing world is so quickly taking up. A new moral compass for our new times.

CONCLUSION: A NEW POINT OF VIEW

Early anthropology, like early design, was trying to change the whole world, its moral compass that expansive. The world has sped up since then, but we can go back to

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[8] BRIC refers to the fast growing economies of Brazil, India, Russia and China, which represents 40% of the world's population. The original source is Wilson and Purushothaman 2003. The first summit of these nations ended June 16, 2009 with "a declaration calling for a 'multipolar world order', diplomatic code for a rejection of America's position as the sole global superpower" (Halperin 2009).

beginnings that go either unspoken or unknown, that we are for a return to first principles, to create a world and to understand a world more than ever requires a unified practice is how we seek to change it.

Our world today is racing at such a clip that the news – what is new – is measured more effectively less by change than by the speed of change, less by tracking velocity than by noting acceleration. If a half-century ago Lévi-Strauss balanced the awe that cultures create stability via structures to combat entropy, his worry was change. And so it was for design, which gave us cybernetics, Eames chairs and the Danish Modern, and the skin and bones architecture of Mies van der Rohe. So too was less more in Elementary Structures of Kinship!

But that paradigm of knowledge and action has given way to a new epoch, where as the world transforms in ever quickening speeds our prototypical designs are less a chair than a genome, less a modern office's filing cabinets than cloud computing, and indeed, less a stable system for reckoning family than a technological shift in how we create communities, not as far as the bird flies but as our Facebook book of friends can be updated, from structures to networks.

And yet, we can find in that old manual of ethics, *Tristes Tropiques* a renewed charge to redouble an ethics for our practice. For no matter how much the engines of our knowledge quicken our pace, shorten our breath and narrow our vision, we can fashion across the two bookends a bridge to reanimate our humanity, the core ethical practice. Lévi-Strauss begins what is a travel book by telling us how much he hates "traveling and explorers." After many passages of travel and of discovery, he concludes with the marvelous phrase, a storied exchange: "in the brief glance, heavy with patience, serenity and mutual forgiveness, that, through some involuntary understanding, one can sometimes exchange with a cat" (1955/1973: 544). Let's remember that Lévi-Strauss was in exile from France, but also from modernity's filth. Already careening from the even-then quickening pace of life – we can read *Tristes Tropiques* as a paean for vanishing worlds, and can take from it a renewed charge to listen past the demands of speed and acceleration to our common humanity – this is an ethics for today more than ever, to listen with patience no matter how brief the glance.

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Policy Change Inside the Enterprise: the Role of Anthropology

ALEXANDRA MACK
Pitney Bowes

JOSH KAPLAN
Yale University

This paper addresses corporate policymaking and its varied meanings through organizational hierarchies and across departments. We argue for an approach to policymaking and implementation in large companies such that the impact on work remains visible to decision makers, and such that employees engage with, and promote the changes being made. In evaluating the effects of a policy change inside our company, we found that not only did the justifications for the original policy not hold up, policy implementation negatively impacted certain job roles and departments and employee engagement was undermined. A key implication of our findings is that implementation plans should assess the impact on affected parties, and we suggest that anthropologists are well-suited to conduct this assessment. If deployed to evaluate the effects and effectiveness of policy changes on people, work practices and perceptions, anthropologists can influence the direction of policy as it is being formulated and tested, and recommend adjustments to better achieve policies' stated aims.

INTRODUCTION

The makings of corporate policy are often invisible to those affected by it; likewise policymakers themselves are often unaware of the impact of the rules they develop on workers below. Policymaking can have a significant effect on the ability of a corporation and its employees to "take care" of business, however, these implications are often not well understood by the policy makers themselves. This paper addresses corporate policymaking and its varied meanings through the corporate hierarchy and across departments -- and the resulting effects – many of which are unintended. As corporations respond to dramatic economic changes, internal policy can have considerable influence on how those shifts are perceived and implemented, as well as on the engagement and commitment of employees.

Policy Research

In social science literature, the term "policy" generally refers to "public" policy or governmental policy. But policy *inside* organizations or corporations has been largely neglected in published research. Likewise, very little anthropological writing considers the workings of policy from inside large corporate entities. To the extent that anthropologists consider policy, they have done so largely from the standpoint of advocacy, i.e., either how actors such as non-governmental organizations and transnational corporations push for public policy, legal, or social change (Ferguson 1994, Hardt and Negri 2000, Gupta and Sharma 2006). Nevertheless, anthropology has long dealt with issues of institutions and power. And since its days in colonial administration, anthropology has, perhaps less directly, studied policy (Wedel, Shore, et al 2005: 32). More recently, ethnography has been touted for its strengths in evaluating policy, including how local actors implement, interpret and sometimes resist policies (Hornberger and Cassels Johnson 2007). When employed by anthropologists, the emphasis is generally on "local" actors engaging with the policy process, framed as people from below engaging with policy from above, and demonstrating how that engagement changes the meaning and outcome of the policy itself. As in other domains, anthropologists who engage in policy research demonstrate a taste for "resistance" and "opening spaces" for action for those typically thought (by non-anthropologists) to have little agency in larger processes.[1] Focus on resistance narrowly characterizes policy as a dominating force against which locals employ "weapons of the weak." Our focus is rather on contradictions, effects, unintended or otherwise, and multiply determined meanings.

Despite the scant research on organizational policy, lessons can be drawn from tracing how policy is designed or implemented in broader contexts such as states or even cities—the domains in which most policy research, including a limited amount of ethnographic research, has been carried out. For instance, policy formulation and implementation are often not carried out by the same bodies. Who generates the policy and the presumed, perceived, or actual authority they have over those expected to implement or follow it might make a significant difference in whether those who implement believe they have a choice in the manner of implementation or whether to implement a given policy at all. Those who implement will have their own views of the policy and to neglect these is to neglect an important dimension in how the policy gets put in action. This means that translation through the hierarchy, country, or bureaucracy will invariably create multiple meanings, interpretations and practices.

Since those who implement the policy and those impacted by it influence both the meaning and the results of a given policy, it is worth considering mechanisms by which stakeholders at all levels and functions of an organization can be included more directly in

1 In anthropology and sociology, the study of policy has been concomitant with recent calls for more public engagement, "public" anthropology and "public" sociology. Recent studies have called for anthropologists to take a more active role in influencing policy, advocating on behalf of positions and groups: "not only studying alternative policies but also working as advocates and with the people they have studied to put pressure on governments, international agencies, and multinational corporations to get them to change" (Okongwu and Menchner 2000; see also Haenn and Casagrande 2007). Such work reflects an outsider-like, adversarial point of view. Our internal study of a policy change in a particular organization is not confrontational in nature, though it did not shy from pointing out the contradictions between stated expectations, implementation and impact, nor did it shy from suggesting that a particular population be treated differently, in this case that the broad employee population outside of the upper executive ranks be treated in a more participative manner – for the good of executives, employees, and good policymaking more generally.

the process of policy formulation and revision; a quick ethnographic audit could help identify affected parties crucial to bring into the process (cf. Hornsby 2006: 78).

As one study puts it: "An anthropological approach attempts to uncover the constellations of actors, activities, and influences that shape policy decisions and their implementation, effects, and how they play out" (Wedel and Shore *et al* 2005: 39). In our case, that constellation of actors, influences and factors shaping our policy and how it played out include the following: 1) external factors stimulating the perceived need for a given policy; 2) organizational culture and structure; 3) original decision maker(s); 4) those who communicate the policy; 5) those who are directly affected; 6) those who carry out operational changes; 7) and those who evaluate the change and implementation.

Before continuing, it is worth laying out definitions of some of the key terms at play in this paper. By *implementation*, we mean "decisions made in carrying out a policy" (O'Toole 1979). By *impact*, we mean effects of policy, implementation, and interpretation, whether intended or unintended. Unlike "public" policy, corporate policy can cover aspects of a business or workplace that are not obviously of fundamental concern to the organization. Corporate policy, moreover, is to be distinguished from a given corporation's "mission" and "vision." A mission is a short statement of the nature of the business and its purpose; a vision is a short statement of the direction the organization hopes to take, an aspiration for the future (Hornsby 2006: 77). As Hornsby puts it, "Missions address what organizations do, visions identify where they are going, and values identify what they believe about the nature of their work." Policies put these into practice through an attempt at action (ibid).

Organizational Context and Mail Delivery Policy Change

At the time of the study, both authors were employed as Workplace Anthropologists in the research division of Pitney Bowes (PB), a 90 year old US based Fortune 500 company. Best known for postage meters, PB has extensive businesses in mail, document management, and business software solutions, including a complex mix of operations and organizational social groups made up by dozens of acquisitions carried out in the last decade. In 2001, the research division was reorganized to take on a more customer centric approach, and non-technologists, including designers and anthropologists, began to join the staff. At the time of research, two dedicated anthropologists were employed at the company and both were put on the project.

Up to that point, anthropologists at PB were mostly deployed to conduct research aimed at understanding customer needs to help develop new products, services, and technologies for the company, but an increasingly common secondary role has been to conduct research meant to solve internal problems or with an eye towards driving a desired internal change (more customer-oriented work practice; cultivating a culture of innovation). As word has spread around the company about what anthropologists can do, they have been put to use for an increasing variety of ends. It was in such an emerging climate that senior management and an internal line of business with whom we had done previous work brought us in to evaluate the impact of a recent policy change.

The policy change, which affected the delivery of certain mail items, came at the direct request of PB's then CEO, who was concerned with the environmental impact of mail, mailroom efficiency, and the potential implications of Do Not Mail legislation on the company's core business. Do Not Mail legislation has been proposed in many states as an equivalent to Do Not Call; the basic idea of the proposed laws is to allow consumers to make legally enforceable requests to be removed from mailing lists. In order to obviate the need to pass legislation that would stop unsolicited mail altogether, Pitney Bowes executives have been concerned with finding solutions to better ensure that what is delivered to consumers is of interest to them. Coupled with the perceived threat of Do Not Mail was the then peaking concern for the environment. Al Gore's film and countless business journals and magazines were excitedly describing the opportunities of "green" or environmentally responsible business, and it was against this background that the new mail delivery policy was proposed.

The specific policy was to limit the delivery of Standard Mail (items such as catalogs, advertisements, and magazines) to Fridays only, and to stop delivering "personal" mail altogether in the three largest Pitney Bowes offices where mail services were managed by Pitney Bowes Management Services (PBMS, a business unit that provides mail delivery and associated services to hundreds of companies around the world). Up to that point all mail regardless of postage class or intended usage was delivered to employees every day. The stated aim of the policy change was to reduce the environmental impact of mail and to increase efficiency. The CEO requested this change to the President of PBMS, who in turn assigned the implementation duties to operations directors and on-site managers. The Vice President of research was concerned about the implications of such a change for a company with mail as its core business and, together with the President of PBMS, asked that data be collected to support either the continuation or termination of the policy. Though we were asked to conduct the research after the policy changes were put in place, we were unaware of these changes until we were asked to do the research. In fact, many PB employees were unaware of the changes – unless and until their work was directly affected.

METHODOLOGY

Following conversations with a research director and client representatives, we decided to limit the scope of our research to understanding the impact of the policy on: PB businesses, incoming mail delivery and employee work practices. Our first step was to match this scope to a research design, and, given pressures to maximize efficiency, determine the minimum necessary research to determine these impacts. We decided that we needed to speak to a representative sample of stakeholders who would care most about the policy change or be most affected by it. Since we did not yet know what the impacts of the policy would be, this sampling could be only partially determined in advance.

In the spirit of ethnographic research, we decided to make the best roadmap we could and just begin observing and speaking to people. What we learned first would determine what we needed to know later. We began with what was easiest to set up and with what we knew we would have to explain to our clients no matter what else we found. This approach had the advantage of allowing us to report on insights about the impacts of the policy as it was being implemented, including how those impacts varied across functional, departmental and hierarchical lines.

Since our work was commissioned by the organization in charge of delivering internal mail, we decided to begin our field research directly with mailroom employees in order to understand how delivery changes affected their work. Our client hoped that by delivering less mail, there would be some gains in efficiency and therefore labor cost savings. We therefore observed incoming mail sortation and delivery in two mailroom locations. We conducted observations on both regular weekdays and on Fridays, since Fridays were the assigned day for Standard Mail delivery. We also used the time to talk with PBMS employees about their daily work practices and the changes in their work based on the policy.

We then conducted contextual interviews with 36 employees in 16 different departments. By "contextual" we mean: 1) in the context of both their ordinary work and as related to their functional position; 2) the role that paper mail plays in that work; and 3) any work or activity triggered by the receipt of mail, either observed by us or described by the interviewees. The idea was to trace the varying use and importance of internal mail to different personalities, departments, functional roles, and levels of the corporate hierarchy. We spoke to employees at ranks ranging from Administrative Assistant to President. Our aim was to understand the work practices and values of employees around incoming mail and to understand the opinions of individuals whose businesses or functions might be affected by the change. This included what employees thought of paper mail, delivery practices, and the recent changes as well as the policy itself.

To get a sense of the importance of a sample of mail to interviewees' work and their conscious perceptions of that importance, we tried to schedule interviews when employees would be going through their daily mail. To get a limited view into what difference different delivery days might make, we asked a number of interviewees to keep several days worth of mail. A subset of these interviewees were asked to keep a log of what mail came in and what they did with it and why. In the interviews, employees discussed their jobs and daily work practices and told us about each mail piece—what it was, what they did with it, what work it created for them, and to what extent it was typical of the mail they generally receive. The interviews often led to more general discussion about the importance of paper mail to work today as opposed to other forms of communication, such as email, and how that has evolved over time.

We quickly saw emerging patterns that shaped our subsequent research and analysis. For instance, one salient pattern was that some departments and functional roles seemed to care more about physical mail receipt than others; some felt that incoming mail was mission critical for their work; others felt that mail had already gone the way of the dinosaur and could not remember the last time they stopped by their mail slot. To begin to trace the differential pattern of the impact of incoming mail to people's work, we charted the types of mail received for each department or functional group, the work stimulated by the mail, and the impact of missing or delayed mail on the work. In order to create an objective view of what mail was arriving, we also noted the composition of items of different postal class and internal PBMS labeling types: First Class, Standard Class, Interoffice, and "Personal" (as classified by mailroom staff).

FINDINGS: MEANINGS, IMPLEMENTATION, IMPACTS

Findings clustered around three key areas: meaning, implementation and impacts, especially impacts on the work of employees and functional areas. In brief, the meaning(s) of the policy varied by the given interpreter, including their functional role and rank and the degree of their involvement with implementation. The ways in which mail affects the work was not considered in the formulation of the policy; decisions about delivery, moreover, were made by employees who generally know very little about the implications those decisions might have on others' work; nor were the impacts of the policy necessarily in alignment with the stated goals of the policy.

Meaning of Policy Change through Corporate Hierarchy and Across Functional Roles

As the policy was passed down through the corporate hierarchy, its interpretation and meaning evolved. Our conversations with senior executives, mid-level executives, and mail center staff revealed different understandings of the policy, both in terms of implementation and implications. When we spoke to employees at different levels—from President of PBMS to operations directors to on-site managers to mail room employees—they each described the policy differently. This partly reflected the differences in the perspectives each individual's job afforded him or her, but also raised issues of both how to relay meaning down the chain of command and how to relay the practicalities of on the ground implementation up to those who make policy. What seemed obvious at higher levels, namely "don't deliver these kinds of mail," was in fact not straightforward at all.

As we moved to speak to employees outside PBMS itself, we found a broad range of knowledge about the policy. The policy change was communicated to managers through email and a posting on an internal website accessible only to managers. The assumption was that managers would relay the message to their employees directly. Since incoming paper mail is not top of mind for many managers, and as many managers are too busy to read mass emails, the majority of workers were not made aware of the new policy before it was implemented. Employees often learned of the new policy only when they received sticky notes on "personal" mail pieces warning them that it and similar items would no longer be delivered. Many employees were made aware of the policy by the authors in the course of our interactions with them. But even those who were aware of the policy were not informed of the goals or intentions behind the policy—only the tactical implementation details. Employees making their own interpretations of the goals, or in some cases, completely lacked understanding of the context: "I don't understand what they are trying to accomplish."

Importance of Mail to the Work

The policy's impact on work fell into two categories, both linked to the classifications shaped by the policy itself: those to do with class of mail (since Standard class mail was to be delivered only on Fridays) and those to do with the need to distinguish "personal" from business mail (resulting from the ban on delivering personal mail). We found that mail mattered much more to some types of work than it did to others. Contrary to expectations that standard mail was not important or time sensitive, we found that in certain case it was both.

Decisions on what to deliver, and when, were made by mail center employees who were largely unaware of the various work contexts of the employees they deliver mail for and how mail may or may not fit into that work. This knowledge is needed in order to distinguish work mail from personal mail, and to understand how time sensitive certain mail pieces might be. For instance, a call center manager who ordered gifts to reward employees found that her catalogs were being marked as personal. A Human Resources lawyer who receives hand-written letters from employees and invitations to professional events worried that these items might appear personal to mail center staff. Overall, there was consensus that determining what mail is personal and sorting it out is difficult or impossible: "You don't want…a mail room entry level employee making decisions about what to destroy and not to."

The presumption inherent in the policy decision to deliver standard class mail on Fridays only was that mail delivered in this class, which takes longer to arrive, must not be important for the business. In fact, we observed many instances of standard mail triggering work, and for more than one department a delay in its receipt could cause problems. For most employees, standard mail such as trade publications helps them stay aware of what is happening in their industry or "triggers an 'aha moment' to investigate a new tool or technique." These are admittedly not time sensitive. However, corporate marketing evaluates ads and articles in magazines both the make advertising decisions and to maintain awareness of how the company is portrayed in the media. For them, "having standard mail delivered one time a week is not acceptable," and this because mail "has already been delayed, so we are adding more time on top of that when we are ostensibly using it to make decisions." An administrative assistant in another department simply noted that the logistics of all standard mail on Friday presented a problem by saying, "I cannot imagine getting a stack of mail for 10 people in my department with the bulk of it being on Friday…I can see the bulk of it sitting there until Monday which defeats the purpose." This is to say that the mail would arrive on Friday but what needed to get done in connection to it would not begin until Monday; the delay was not just until the end of the week, but into the following one.

Likewise, "personal" mail can have an impact on employees' ability to do their jobs. We observed that, in practice, what was marked "personal" was often work-related (e.g. Bar Association mailings to a lawyer). But even mail that was truly not work related in content can affect the work. Employees who need to be at home to wait to sign for an important item are distracted from work. Some employees, such as contractors, interns, and people temporarily stationed overseas do not even have permanent addresses where they can receive mail. As one employee noted, "It's in the same category as 'we help with emergency day care.' We help employees…keep…more focused at work"

Impacts of the policy change

A key aspect of our analysis was to assess the impacts of the policy relative to the initial stated goals, and the data revealed areas where there were unforeseen impacts.

Impacts relative to initial corporate/policy goals—The primary reasons why the CEO had asked for the change in delivery policy were expressed as taking steps to counter the perceived threat of Do Not Mail legislation. He believed that the primary drivers for Do Not Mail legislation were consumer annoyance with unwanted mail and consumer concerns about the environmental impact of mail (particularly the number of pieces that are thrown out because they are unwanted). While the implementation of the policy may have reduced the number of unwanted pieces delivered to some employees, it did not did not prevent paper from being produced and transported, which is where the majority of mail's carbon footprint lies.

The other stated goal of the policy change was to increase mailroom efficiency. Based on our observations, PBMS mailrooms were not saving work time. In fact, we observed that if anything, the policy change slowed mail center employees down rather than increase their efficiency. They had to spend additional time looking at each mail piece, placing Standard Mail items into new pigeonholes (to await Friday delivery), and to place warning labels on "personal" items to inform recipients to redirect such mail to their home addresses. The time saved by delivering less mail Monday-Thursday was minimal, since they still had to walk their entire rounds.

We also found that even for mail center employees who work with mail every day, identifying the different classes of mail is not always straightforward. We noticed that many items with a "non-profit" permit were delivered throughout the week, though these are in fact standard mail. Likewise, mailers are allowed a certain amount of leeway in how they design permit indicia, meaning they do not always say "standard mail" on them. And, if a mailer uses a meter for standard mail, the only indication of the class comes from the postage amount. These can be very fine-grained details to look for during mail sortation, especially when the primary concern is ensuring the right mail piece gets to the right person. And the impact is mail gets mis-sorted and potentially misdelivered; what seemed like a straightforward directive : "don't deliver catalogs and junk mail" (words understood, and described by our clients, as taboo in a mail company) – was in practice difficult or impossible to implement, at least at the level of mail delivery.

So the policy did not, in fact, address its stated areas of intent: 1) it did not benefit the environment and could not, therefore, be used to counter the threat of Do Not Mail; 2) it did not save employee work time and did not, therefore, reduce labor costs. Moreover, the implementation process was vulnerable to errors that could impact both the work of intended mail recipients and the company's bottom line.

Impacts Beyond Stated Goals—While one of the stated goals of the policy was to take steps to address concerns about unwanted mail and the environment, many employees were worried about the possibility that stopping internal mail might create negative publicity for the company. As one employee noted, "To me it's so conflicting to be doing business on this and not deliver the mail…We try…to run [companies'] mailrooms, and then we say by the way, we don't want to deliver your mail." Likewise, many were concerned about the message the policy sent about mail as an industry, noting that it contradicts PB's message that mail is effective and valuable, and that "PB should be encouraging mail, not discouraging it." Others maintained that since the majority of the company's customers are mailers, anything that could cannibalize the core business should be avoided.

The effect on employees, and in particular "employee engagement" was perhaps the most tangible impact we observed. Employee engagement is currently a key operational issue in many companies, including Pitney Bowes, as it is based on the philosophy that engaged employees are more likely to perform to the benefit of the organization (Robinson 2004). While engagement is generally measured in surveys, we observed that, for many employees, a level of trust and comfort in the organization was taken away by the policy change. Employees cared about their mail and how the company might handle it. As one stated, "Mail is a very personal thing, to me anyway. What's in my mailbox is mine. I don't want you making that call for me." Another simply said that allowing him to receive the mail he wants to get at work "is the minimum the company can do for me."

Engagement was also affected by the ways in which the policy was (and was not) communicated. The general sentiment was that slapping an orange sticky on mail was an inappropriate way for the company to communicate. Moreover, employees genuinely wanted to know the rationale for the policy. Employees' level of understanding of the policy goals, as long as they bought into them, had a direct impact on their engagement with the policy. As one employee noted, "I want PB to tell me what the value is. If there is no value to PB I don't want to take the overhead on myself." In this case, many employees who were informed of the environmental/Do Not Mail justification did not buy it, as they knew that at the point in the mail process at which the policy comes into play, the carbon footprint has already "been sunk."

Using an ethnographic approach thus revealed impacts and "costs" on stakeholders not usually included in evaluations or assessments (cf Henry, Bales, and Graves 2007). One of these was clearly on employee engagement. Had the policy process called for employee involvement from the outset, the impact on engagement might have been positive rather than detrimental.

RESEARCH FINDINGS HELP TRIGGER INTERNAL DEVELOPMENTS

During the course of the research, we worked closely with our sponsors in PBMS. Both the Vice President for Operations, the Area Operations Director, and the Customer Operations Manager for the Pitney Bowes mail centers were aware of our findings and we had numerous discussions on how to move forward. They were extremely concerned that changes in mail delivery should have a positive impact for both customers and PBMS's bottom line, and were interested in the findings because they had also been skeptical of whether the policy would have the effects intended by the CEO. We also jointly reflected on ways in which PBMS could offer new services to external customers that might positively address concerns about environmental issues and unwanted mail.

These findings were delivered to the President of PBMS, who was also very receptive to the conclusions and who planned to deliver selected insights up the line to the CEO. As of the time of writing (approximately one year after the findings were delivered to the President of PBMS), standard mail is being delivered the day it arrives in the mail center. Sticky notes are no longer placed on "personal" mail and catalogs and magazines deemed personal are shredded rather than delivered. According to mail center staff, the volume of both of these categories of mail has greatly reduced from when the initial policy was put in place. It is difficult to disentangle the causal factors as to why this is the case. Staff believe the reduction in mail volumes have declined as a direct result of the policy changes, but internal mail volumes had already been declining for several years. The drop most likely resulted from some combination of these two factors.

Subsequent internal research conducted in connection to other projects has led to convergent findings indicating the need for transparency in corporate intent and open communications. The findings from these studies, some still ongoing, have been communicated to stakeholders throughout the company, and broader changes are becoming apparent as these stakeholders develop new policies and actions. For example, a Vice President in Corporate Marketing, who both took part in the initial study and was a recipient of later research, has launched a corporate wide "idea challenge" asking employees how to foster more meaningful dialog between management and employees. In general, these high-level efforts are in tension with a widespread feeling in the company that employees are not widely engaged by upper management: that key decisions, including those directly impacting employees, are made without their input, and that the rationale for these decisions is usually not well explained.

This point ties directly into the question – raised by several other papers in this conference – of what happens to the results of research after the "hand off" to clients. Since our clients were internal and since the work described here was one of a series of studies done for executives across the company – the results have become part of accumulated knowledge at the upper ranks of the organization as well as in the research division. So it is now well known that employees want more transparency and better communication from the upper ranks; that they would like to be more involved. However, as with any acquired knowledge, long-standing structural and organizational cultural patterns can stand in the way of action: the use of individual and work group "objectives" can prevent thinking about the greater good of the organization, including involvement of individuals and groups outside of one's direct mandate.

CONCLUSION: IMPLICATIONS FOR POLICY MAKING

A seemingly banal internal policy can have serious implications on an organization's external image; in the present case, the change triggered strong reactions among employees as to their perceptions of the company. It also impacted the way work got done inside the business. If employees had been engaged in the policy making and implementation process, employees might not only have become "engaged," they could be directly involved in managing external perceptions of their company. Policy can be a way of engaging employees in achieving corporate goals as opposed to just telling them this is what is being done. In order to ensure that policy is followed, understood, and bought into, management would need to involve employees in policy changes and the reasons behind them. This will avoid both a lowering of employee engagement and could have the effect of motivating employees to transmit positive messages externally.

Since those who implement the policy and those who have a stake in it – in the broad sense of being impacted by it – influence both the meaning and the results of a given policy, it is worth considering mechanisms by which stakeholders at all levels and functions of an organization can be included more directly in the process of policy formulation and revision (Hornsby 2006: 78). With respect to our case, this would have been largely impossible at the moment of the policy's initial formulation, as we did not know in advance who would be affected or how. A quick ethnographic audit might have defined the key affected parties clearly enough to bring them to the drafting table (cf. Hornsby 2006).[2] Once these are established, an "information loop" can be put in place to demonstrate some of the impacts of policy changes as they occur in implementation. Using ethnographically derived information for this purpose brings into view affected parties, including widely diverged

2 A growing literature suggests that participation in workplace decision making increases employee loyalty and trust and thus reduces resistance to change: "Direct involvement in the change process enhances employee acceptance of change, due in part to the enhance information flows that help employees understand the need for change and in part to employees having part ownership in the change process" (Schwochau and Delaney *et al* 1997: 381).

perspectives, that are normally not considered for the purposes of policy formulation, much less evaluation. Consideration of these perspectives combined with actual observation of the practical implementation of policy can point to insights and impacts that policymakers and lead implementers would not be able to articulate or otherwise consider (cf. Evans and Lambert 2008). In this case, a well intentioned desire to address environmental and business concerns combined with a rush to respond to a high level corporate request meant that the potential impacts of the policy were not fully considered in advance of implementation. Nonetheless, anthropologists were strategically brought into the discussion at a critical juncture and were able to influence future directions and help forestall negative reactions from both employees and the outside world.

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SESSION 2 – REDEFINING WHAT'S CORE
BRIAN RINK (IDEO, USA), CURATOR

Flexibility and the Curatorial Eye: Why and How Well-Documented Fieldwork Sustains Value Over Time

ELIZABETH F. CHURCHILL
Yahoo! Research

AME ELLIOTT
IDEO

This paper discusses two distinguishing features of ethnographic work, program flexibility and data flexibility. These forms of flexibility deliver business benefits at two different timeframes. Within the timeframe of a given project, ethnographic practice is necessarily reflective and reflexive; ethnographic training insists researchers be flexible. This means projects are responsive to emerging results, and can be reframed in situ without significant additional investment. After the project has completed, carefully managed, stored and curated ethnographic materials can answer new questions, perhaps posed years after the project has ended. Thus, ethnographic work can generate business impact by sustaining value over time. Two cases illustrate the value-generating qualities of ethnographic work: one recently conducted investigation of drinking water in India and one conducted ten years ago looking at changes in collaborative practices as a result of the adoption of mobile technologies. Discussion of these cases illustrates the importance of flexibility and the curatorial eye for generating business value from ethnography.

INTRODUCTION

Qualitative, field-based studies are increasingly called upon within business contexts, and, over the past ten years, design-oriented ethnography has garnered much attention in the press (e.g., Ante, 2006). As has been well documented in the EPIC conferences and elsewhere, qualitative work has been carried out to drive insights into products, features, services, applications, infrastructures, data flows, data representations, security and access protocols, organizational processes, and business decisions (e.g., Cefkin, 2009; Christensen and Raynor, 1997; Fine et al., 2008; Flynn and Lovejoy, 2008). There is no question that well conducted qualitative research has delivered value by providing insights into markets that cut across traditional market segments, by presenting understandings of the everyday consumption of services and products, by painting realistic scenarios of uptake and offering views onto early adopter behaviors that are more nuanced than data that can be gathered remotely.

USE AND REUSE: FLEXIBILITY AND DATA CURATION

In this paper, we wish to further discussion of our potential for highlighting areas of impact within organizations, as discussed by Flynn and Lovejoy (2008) who underscore the ways in which contextual analysis of our own practices can illuminate potential for new and renewed forms of strategic engagement within corporations. In furthering this discussion, we wish to focus on two aspects of our professional practice which are less often cited as offering clear business value: program flexibility and data flexibility. Flexibility in these two different timeframes -- within the program and within data reanalysis after the program finishes – both contribute to the business value of ethnography. We will address each in turn.

Program Flexibility

By program flexibility, we mean the ability to re-direct the course of a project while conducting the research. In design-oriented ethnography, the research process is iterative, with the discussion evolving to take advantage of what the researcher learns during the observation or interview. For example, interview protocols may evolve through the course of a project, if necessitated by emerging understandings of the situated practices under investigation. Changes made in response to observations, often at fast pace and in situ, require a reconfiguration of the data gathering instruments - which in ethnographic work are the ethnographers themselves. The reason for this flexibility is ideological and rooted in the validity of open-ended conversations that vary individual to individual, rather than an insistence on a consistently applied instrument administered to every participant. By contrast, experimental methods and survey methods embody predetermined assertions about construct relevance and are less suited to the making of modifications while a program is running. The tight relationship between data collection and analysis better equips ethnographic methods to respond quickly to emergent directions during research.

Data Flexibility

By data flexibility, we mean the revisiting and reviewing of data from previous projects for new insights, which can lead to the derivation of previously unseen connections between areas. The very 'messiness' of ethnography's systematic but open approach to data collection and agnosticism about data formats is its strength for providing ongoing long-term value. Design ethnographers generate written notes, photographs, video and films, written and drawn sketches, and produce recreations of relevant artifacts. As a result of the richness of the collected data, datasets contain not just the answers to the questions posed, where analysis can focus on predetermined or emerging issues in relevant frames, but also contain rich contextual, or "extraneous", data. Qualitative, field-based data collection therefore yields highly rich and nuanced data that carries with it the contextual meta-data for rereading its significance for other settings. Data from other forms of empirical enquiry are often not so rich and not as facile; experimental control implies data can seldom be reviewed for new insights except within the confines of the experimental questions that were initially posed.

The nature of evidence, its form, constrains what questions can be asked of it. By maintaining an open mind, field researchers often collect additional contextual data that later can yield great gains.

These are central areas of value that have to date been undersold, usually being subjugated to the 'product' of the field program – usually design recommendations, guidelines and prototypes. Both of these capabilities imply a particular set of practices around program management, including data gathering, storage and curation. These have, to date, been taken as necessary skills for an ethnographer, but have not been identified as providing particular value in an organization, in part as a result of the focus on outcome/product rather than process. We believe, it is important to highlight these two skill-sets. Firstly, qualitative researchers are trained to be reflective about the specific program details (Are we collecting the right data? Are we using the right methods to gather those data?) and also trained to be reflective at a strategic level (Why are we conducting this research? What are the implications of using the current methods?). Researchers are also trained to be critically reflective of programs that are not delivering results to questions posed. Strategic insights can result from such critical reflections, but credit may not be accorded to the field research team for driving these insights. Worse, if a program is halted or realigned during a field trip, on occasion the assumption is that the original field program was a failure – not that the orienting assumptions at strategy level were identified as being flawed, and that investment has been protected through reorientation. Secondly, while qualitative data is acknowledged to be 'rich', two critiques that are levied is that it is more time consuming to collect and less able to be generalized. We believe that the additional contextual detail means qualitative data can often be re-visited for new insights, and this can save time in project planning downstream. It is important to understand that investment in a field project can continue to have pay-offs much later. Data storage, organization, indexing and reanalysis are key skills of good qualitative researchers. Indeed, an essential part of our craft is the storage and curation of field results, and well-trained field researchers are careful to incorporate data storage and indexing as part of the program planning and ongoing program management.

CASE STUDIES

To illustrate our points, in this paper we discuss two projects, one conducted recently and one conducted several years ago. The first, a study conducted in 2009, explored market-driven approaches to improving access to drinking water by the poor in India. Field research focused on finding opportunities for transportation and storage of treated water in slums and villages in three Indian states. The second study, conducted in 1999-2000, addressed changes in work collaborations resulting from the introduction of mobile technologies in particular cell phones and laptops.

Case Study 1: Drinking Water and Storage in India

In January 2009, a team an IDEO research team spent three weeks in India collaborating with Acumen Fund on the Ripple Effect, an eighteen-month project backed by the Gates Foundation to increase access to drinking water by the poor. The strong social mission of this project mandated a very lean budget, and the team was challenged to deliver maximum business value with limited financial outlay. The three-week duration of this field visit was a hard constraint determined by the budget, and the team was responsible for reporting opportunities from diverse water contexts throughout India during that time. There were significant logistical challenges to accessing our field sites in Gujarati villages, slums in Bangalore, and peri-urban villages outside Hyderabad. The team traveled approximately 4,000 km/2,485 miles around India by plane, car, and rickshaw in a program designed to balance breadth, or reporting needs from multiple contexts, and depth, or taking the time to cultivate and maintain the personal relationships essential to working in India.

Recruiting participants started with Acumen Fund's network of social enterprises. We relied on their introductions to local water organizations, and used those organizations to get access to communities. Our partner organizations live and work in the communities we visited, so we deferred to them about how to navigate community politics. Despite our intense time constraints, we spent up to one third of our time on visits to the water organizations' regional offices and in introductory meetings with community leadership. Once in the field, getting access to appropriate participants was still a challenge since local leaders sometimes had strong opinions about who would show the community in the best light, putting intense pressure on getting the most useful responses during precious time with our participants.

Program flexibility allowed us to respond to emerging information in the field and to deliver maximum business value for Acumen Fund and Gates Foundation without a need to extend the time in the field. One example of in situ adaptation during this program was guiding the snowball sampling method to appropriate respondents. For example, if participants were embarrassed to discuss something as personal as water use in front of strangers, or over-dramatizing their difficulties, we moved on. Because of our flexibility, including the opportunistic decisions to divide into two parallel tracks or respectfully cut short awkward encounters, we were able to meet the program's goals and interview a mix of families including those without access to treated drinking water (11 families), those who purchased treated drinking water (5 families), and those who had access to treated drinking water but chose not to purchase it (5 families).

Over the course of this fieldwork, our team made changes to the protocol that allowed our team to deliver maximum business value under intense time constraints. We knew from previous field research in the developing world (see *Human Centered Design Toolkit* in Web Resources), that supporting interviews with physical artifacts is effective. We went into the field with photo cards and sketches to help communicate, but made a decision to add a new activity in response to emerging needs. Because water is relatively cheap for its weight and bulk, we experimented with light-weight, high-value items that could be bundled with water by showing participants products from local kiosks such as singe shampoos, incense, and fruit that a door-to-door water peddler could also sell to make a water delivery route economically viable for the peddler while keeping water affordable for customers. This activity effectively helped the team gather more specific feedback, and was a nice to complement to the photo sorting and discussion cards we used throughout the fieldwork.

A second change to the program demonstrates an agile re-framing of the design challenge while in the field. We were contracted to explore community water storage solutions including shared tanks, and our research plan dedicated some of our very limited time to that activity. However, in the field we quickly learned that shared tanks are undesirable because the origin and freshness of the water inside is questionable. We made an in situ decision to divert time away from community storage solutions towards a new activity better able to serve our ultimate objective of increasing access to treated water by the very poor. We were surprised that groups of slum families pooled their resources to order an entire tanker truck of water because our earlier research suggested it was not feasible. As soon as the team identified the mistaken assumption about the desirability of shared community storage early in the research, and learned that tankers we feasible, we were able to respond by recruiting a tanker truck for a visit and interview the driver. The flexibility to adapt the program while it was running led our team to gather meaningful insights with business value in a limited time.

Case Study 2: Working With Mobility

From 1999 until May 2000 a three-phase project was conducted to address changes in work-based communications resulting from the introduction of mobile technologies. This period of time saw an explosion of the use of mobile technologies such as cell phones, laptops, mobile email and SMS providers, as well as the convergence of walkie-talkie functionality with cellular telephones. The project was developed to more deeply understand the implications of the introduction of these technologies into the workplace, and consisted of three parts: a diary study of the use of the RIM Blackberry 850 email/pager by two collaborating co-workers, a field-based interview study of 17 sales people from a multi-national printer company in the US and a field-based study of 11 mobile phone users in the UK, looking at patterns of recreational and work use. In all three phases, data gathered were text, photographs, drawings, representations of regularly used artifacts, and where possible video recordings. In the case of the field studies rather than the diary study, field interviews were conducted and where possible interviewees were shadowed for between several hours to a day. The study results focused primarily on people's management of data flows in collaborations, and on development of applications for graceful management of service interruptions. Key findings from the study with respect to use of mobile technologies were reported internally, and a framework for design was developed and published (Churchill and Wakeford, 2001).

For the purposes of this paper we will focus on the second phase study of sales people. Whilst the study was predominantly about the use of mobile technologies, two themes emerged at the time and were also documented initially in the form of 'asides' – reflecting our point in the previous section of this paper about program flexibility. The first theme was the effects of "hot-desking" that were intimately linked the provision of laptops and cell phones to all personnel, replacing desktop computers and phones. The second related observation was the use of fliers and posters in the physical space as a means of communication between members of the sales team. Both of these issues were pursued as side issues to the primary data collection. These insights from this phase of the project, and supporting data were subsequently used on three occasions: first to drive proposals for the development of digital bulletin boards with a back-end social networking site that is also accessible from cell phones (Churchill and Nelson, 2009). Secondly the data and frameworks were used to outline design opportunities for mobile applications for recreational use, and to drive the project ideation phase of a project conducted in Japan, comparatively addressing infrastructure, hardware and service provision in Japan, the US and Europe; data from the earlier study were used as a primer and to drive research questions prior to the project launch. Finally, the data and frameworks were adapted in developing a program addressing the practices of remote work in homes and in Internet cafés workers, conducted in 2004.

In all instances, the original data were mined for potential insights, the original framework was questioned and elaborated and new questions were generated to illuminate what factors did and did not generalize in the face of market changes. A key factor in the success of this data reuse was that data collected were organized according to a scheme agreed upon by the team. Following Emerson et al.'s schema, during the original studies, we made "jottings", that is recording activities in terms of what, how, where and when on paper; we made drawings of the space and took photographs of spaces used and of artifacts; we wrote extensive notes following time in the field in the form of multi-media documents depicting the settings and specific scenes; we generated characterizations of the people involved and sketches of incidents, combined all these into episodes and tales with dialogue. In all instances, while generating detailed representations for the project at hand, we were also generating rich data capable providing opportunities for re-experiencing, collecting and storing data with the curatorial eye of a documentarian. It is this focus that distinguishes qualitative work from other forms of research – the focus on providing sufficient data to enable re-experiencing.

DISCUSSION: TAKING CARE OF BUSINESS

The topic of EPIC 2009 is how we can continue to have an impact and stay relevant in today's economic climate. We have argued that program and data flexibility are two key areas of value that are currently undersold in business contexts. The two key ways program flexibility generates business value are by minimizing risk and creating rapid responses to changing market directions and organizational directives. The ability of ethnography to uncover latent customer needs and drive innovation is well documented as noted above, but an under-sold aspect of practice is the ability to reduce risk by iteratively evolving the research plan during a program and by reflecting back on orienting assumptions at business strategy levels during the initial phases of a field program. For example, if the second week of interviews on a project about in-home health monitoring devices reveals ambivalence about the topic and confusion about why it would be desirable, an ethnographic project can alter the discussion guide to focus more on community support mechanisms. This reduces risk by allowing program managers to spend a fixed amount on need-finding through ethnographic methods, and emerge at the end of the program with identified needs, rather than suggestions for further studies. A second benefit of program flexibility is the ability to evolve the research questions to meet changing organizational imperatives. For example, a company that has manufactured industrial equipment competing on low price may decide that future products should help the company build credibility as a service organization specializing in high-value added interactions with staff using their formerly commoditized machines. Some forms of customer research would be unable to respond to the shift and would result in answers to questions that are no longer relevant or in cancelled programs. In contrast, design-oriented ethnography can evolve the program mid-stream by maintaining the core human experience of interacting with the equipment, and identifying the most frustrating elements of interactions with the system that are prime candidates for escalation into a service. Of course, as Flynn and Lovejoy (2008) point out, internal buy-in at higher management levels must be in place; reorientations must be interpreted as having potential to drive strategic reassessment, not interpreted as failed field programs. Post program completion, ethnographic data can be re-mined to provide insights on questions and issues that may not emerge for some time. This property of ethnographic work is data flexibility. A key part of data flexibility is a commitment to a good data management scheme and careful curation of rich, multimedia data.

SUMMARY

In this paper, we have presented two case studies, where we have highlighted how key features of ethnographic practices and processes in addition to specific project deliverables and products offer sustained business value. These features are program and data flexibility. Program flexibility derives from the reflective process of framing and reframing projects as data are gathered in the field, and the skill of the ethnographer in multi-layered analysis of activity. We further discussed how a key aspect of this business value comes from management, indexing and annotation of stored multi-media data. We see opportunities not only for better technologies of data management and curation, but also business value in more clearly supporting these features of field activity.

NOTES

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"Name That Segment!": Questioning the Unquestioned Authority of Numbers

DONNA K. FLYNN
Microsoft Corporation

TRACEY LOVEJOY
Microsoft Corporation

DAVID SIEGEL
Dray & Associates, Inc.

SUSAN DRAY
Dray & Associates, Inc.

In many companies, numbers equal authority. Quantitative data is often viewed as more definitive than qualitative data, while its shortcomings are overlooked. Many of us have worked to marry quantitative with qualitative methods inside organizations to present a fuller view of the people for whom we develop. One area of research that increasingly needs to blend quantitative and qualitative methods is user segmentations. Our software technology product team has been using a segmentation based on quantitative data since 2005. One outcome of this effort has been the development of an algorithm–based "typing" tool intended to be used as a standard tool in recruiting for all segmentation-focused research. We learned that the algorithm was an indecipherable black box, its inner workings opaque even to those who owned it internally. This case study looks at how qualitative research came up against the impenetrable authority of a quantitative segmentation and its associated typing tool, and subsequently contributed to the redesign of future segmentation methodologies and the integration of qualitative research as a key component of segmentation creation.

PROLOGUE: THE "NAME THAT SEGMENT" GAME

It was a sunny day in Seattle, and we were setting up the "Greenhouse" room in our design studio—named as much for its warm, windowed corner location as its role in hosting analysis and brainstorming sessions—in preparation for a carefully choreographed encounter with our market research partners. David and Susan were organizing photos of our field participants on the whiteboards and walls, while Tracey and Donna reviewed the stories of each participant that we would share with our partners. It was the end of a long week of collaborative analysis, and the Greenhouse walls were thick with field photos, quotes, segmentation screener results, and scribbled post-it notes. Even the warmed windows were wearing the rich data we had *been wading through all week, with our wise participants peering down on us from their perches of individual truths.*

Our goal for the work-session was to share with our market research partners the conundrum that our qualitative research findings of the segments was not meshing with their quantitatively-based segment profiles. The disconnect became quickly apparent to us in the field, and although we had engaged our market research partners in multiple conversations about it we knew they were still not fully understanding the implications of this disconnect: that the segmentation was seriously flawed by not accurately representing significant behavioral patterns. It was time to engage our partners experientially, and let them bring their own interpretation to the qualitative data.

The three market researchers who collectively owned the segmentation—and with whom we had a longstanding, strong relationship—soon joined us in the Greenhouse. Six of us clustered around the table in the richly cluttered data room, while Tracey moved around on foot to point out 9 different participants as we recounted their stories. For each participant, we orally painted their portrait: "Joan is 41 years old, lives with her husband and daughter, and owns 2 small businesses, a sandwich shop and a flower shop. She is planning to buy a new phone as soon as her contract is up, likely a BlackBerry. It is important for her to try to always answer calls because …" At the end of each story, we asked our partners to privately write down what segment they thought that person classified into, before sharing them openly and discussing…

CONFRONTING THE BLACK BOX: BEHIND THE SCENES OF A SEGMENTATION REFRESH

In 2005, Microsoft market researchers launched the Windows Mobile division's first large-scale quantitative effort to understand and segment the mobile-phone owning population, aged 16-65, in the United States and Western Europe. Although there had been some prior efforts to create typologies for mobile technologies, this was the first time the business was provided a comprehensive and rigorous segmentation. The initial methodology consisted of quantitative surveys across priority markets and did not include any qualitative components, such as to inform the segmentation survey or validate the segmentation model.

One output from the segmentation was a typing tool that was used to recruit people into the segments for future research, using an abbreviated list of questions from the large survey. This is a necessary deliverable for any segmentation, and many researchers in both marketing and engineering—including ourselves—relied on it to recruit participants for various studies. Although we used it extensively, we didn't really understand the algorithms or analytic assumptions that drove the tool or why the items were determined to be the most important ones. We had no transparency into the algorithm, and nor did we dig deeply into it of our own accord. In those early segmentation days, the typing tool had a fairly high accuracy and we became habituated to using it.

The absence of qualitative components in this first segmentation effort presented an opportunity for Donna's UX Strategy team[1] to step in and examine some of the questions around the framework and accrue deep knowledge about these new segments that were virtually unknown to the business. The ethnographic research and subsequent deliverables around the segmentation grew to have broad impact, as gauged by organizational adoption of our customer tools (personas, scenarios, frameworks), the depth of target customer knowledge we instilled in our executive leadership and individual contributors across the division, and the 'influence of some of our models on a number of critical business decisions. On the other hand, our market research colleagues continued to dismiss the value of our ethnographic work on the segmentation itself, and saw it only as filling in "day in the life" details for persona development.

The segmentation filled such a huge void for the organization that it was rapidly and enthusiastically adopted at all levels; finally the organization had a common framework for talking about target customers. The risky underside of this broad and deep adoption of the model only became apparent to us later, when we saw that broad assumptions about characteristics of the segments were carried over to subsequent iterations of the model. Work around this early phase segmentation also set the stage for the rest of our story here– namely the way in which the statistical algorithms behind the segmentation became imbued with unassailable authority and created a veiled 'black box' around the analytics– until our qualitative work uncovered some severe flaws in the methodological model and contributed to its undoing.

As the business grew, the target markets increased and two additional regional segmentations were created. It was quickly acknowledged that this approach would lead to a proliferation of segments. Therefore a decision was made to combine the segmentations. The market researchers stewarded the analytics of the worldwide model with a vendor, but the larger stakeholder team that we belonged to had no insight into the process they pursued for re-factoring and defining the segments. We were at that time blissfully unaware that an intentional change was being made to the segmentation model – the cluster analysis itself was being based only on attitudinal questions regarding purchase drivers and all usage variables were removed from the analytics. This would have enormous implications moving forward.

The combined segmentation appeared on the outside to be an iterative evolution of the prior model – sharing all the same segments with one additional segment that heavily represented customer patterns evident in the Asian markets. This is important because it implied little change in the characteristics and differentiators of those segments that carried the same name as in the past model. The segments that everyone from executives to

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[1] In 2005 Donna Flynn started a Windows Mobile UX Strategy Team with the charter to drive target market and customer understanding throughout the development cycle from a user experience perspective, as a partner and complement to the work done in the marketing teams. The team consisted of three people: Donna Flynn, Rive Citron and Tracey Lovejoy, two of whom are authors.

researchers to engineers had come to know so intimately were still there, seemingly unchanged. Consequently the broad assumptions about who comprised a segment and key differentiators for them remained intact.

THE UNRAVELING OF A SEGMENTATION

In 2008 this 'worldwide' segmentation was refreshed, updating measurements of the sizes of the segments and adding five additional countries, bringing the total number of countries represented to twelve. The vendor proclaimed that although the size of the segments had changed, the segments themselves were still relevant. This refresh – again based only on quantitative data – presented another opportunity for the UX Strategy team to go back into the field. Since most of the segments persisted from the prior model, our approach was to update knowledge of what the segments were up to in real life in 2008 – what had changed in the two years since we'd spent time with them? The study was explicitly not about validating the segmentation itself, since its apparent consistency with the prior segmentation imbued it with high internal credibility in the organization. Dray & Associates were hired to implement the field work, which combined lengthy in-home interviews with examination of artifacts, experience collaging, and day-in-the life timelines – with 43 participants across 2 priority markets, recruited using the updated segmentation algorithm-based typing tool.

Finding Our Segments in the Field

Within days in the field, we knew something was terribly wrong - at least half of our participants did not fit into the segments as we had understood them. Because the basic behaviors and attitudes of the segments were supposed to have been consistent with the prior segmentation we did not understand why our recruited respondents did not match the segment definitions. This immediately raised questions at a number of levels. Was the algorithm behind this new screening tool fundamentally flawed? Had the segments themselves changed that much in two years? Had the screener been properly administered? Were these people outliers? Had people given misleading answers on the screener that did not reflect their actual purchase drivers?

We made some changes on the fly to our protocol to try to unpack these questions. We started to have our recruiter screen people according to both the old and new screening tools. We also took time with people during the sessions to re-administer the screener and explore discrepancies. Sometimes as a result of these discussions we identified how the respondents would have answered the questions had they interpreted the questions differently. We also began experimenting with the typing tool, to see how large or small changes in answers to individual items would change not only the resulting segment assignments, but the entire profile of scores for each person across all the segments.

Meanwhile, as the data was coming in, we maintained communication with our market research team to keep them apprised of our issues. Early on they began to acknowledge that there might be a difference between the new segmentation model based on purchase drivers and the old one based on purchase drivers and behavioral patterns, but they remained insistent that the former should still be meaningful for all aspects of product development.

The Analytic Unveiling

Re-administering the screening tool in the field gave us a chance to do an informal check on the reliability of the tool, i.e., the degree to which people's segment assignments were influenced by random factors.[2] We saw that people changed their answers frequently. Some of these changes were small, clearly attributable to simple inconsistencies in how people answer on a 7 point scale from one time to the next. Others were more dramatic, attributable to inconsistencies in the way people interpreted questions or specific words they found ambiguous from one time to the next. With ambiguous questions, an element of chance influences how people may interpret the question. What was particularly interesting was that even small changes in response sometimes produced changes in segment assignment. This indicated that segment assignment was quite sensitive to random fluctuations in responses on the screener. We later learned that the reliability of the typing tool had never been evaluated. Nor had it ever previously been validated[3] by demonstrating that it accurately predicted some important behavior in a new sample. Of course, our discovery that many people in our study did not fit the existing segment descriptions raised very strong questions about the tool's validity.

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[2] Reliability is defined conceptually as the opposite of noise in the data. High reliability says that there is in fact some phenomenon that is being measured and that scores are not random. In practice, reliability is demonstrated by showing that there is relative consistency across administrations of a measure at different times with the same people, or across different judges scoring the measure independently. For a measure that consists of multiple items trying to measure the same variable, reliability can also be demonstrated by showing that, if you divide the items in half randomly, scores on one half predict scores on the other half.

[3] While high reliability merely says that you are measuring something other than noise, demonstrating validity requires evidence that you are measuring what you think you are measuring, such as by showing that the measure predicts other theoretically related behaviors. Validity can be no greater than reliability, because only the non-random component of the scores can be valid. In addition to what appeared to be random changes in people's answers when we re-administered the segmentation tool questions, we also identified some systematic biases in how people interpreted certain concepts or words. Systematic biases create a problem with validity, as opposed to reliability. For example, some items involved the word "productivity." There was a tendency for people who used their mobile phones for work-related tasks to interpret this as being related to work. People who used their phones only for personal use often interpreted productivity much more broadly. For example, they might consider that a mobile phone made them more productive because they could make calls while in the car running errands. Another issue was that people who were less technically sophisticated tended to misinterpret technical terms in ways that made them score into more technically sophisticated segments. These people tended to think, for example, that all cell phones are by definition Wifi devices, and so had indicated that Wifi was extremely important to them, when in reality they did not use it at all.

We also were concerned about the effect of the fact that the typing tool assigned people to whatever segment they received the highest score for. It was very rare for people to have a single segment score that was dramatically higher than the other segment scores. However, the algorithm would assign to Segment A, with equal apparent certainty, a person with a true peak on Segment A and a person whose Segment A score was only minutely higher than his Segment D score. If one had to bet on a single segment for any individual, the best choice would of course be to bet on the one with the highest probability. However, since the probabilities were spread fairly evenly across eight segments, people were actually more likely to belong to one of the seven segments other than their top-scoring one[4]. We found this absolute assignment to be haphazard, and only sometimes aligned with people's true attitudes and behaviors.

Taking these factors together, we were able to explain some of the reasons why the typing tool was breaking down in identifying appropriate matches to the segments. The probing that we were able to do in the qualitative research provided us insights into some of the issues with the typing tool and allowed us to paint detailed pictures of the heterogeneity within each segment.

Penetrating The 'Black Box'

Out of the field and back at Microsoft, we had several face-to-face meetings with the market researchers and finally came to understand two pivotal things that had previously been masked. First, the segmentation had changed dramatically because the clusters no longer took behavioral patterns into account, only mobile phone attitudes and purchase criteria. Secondly, the market researchers themselves were uncomfortable with the typing tool unequivocally assigning a person to a single segment because there was a lot of overlap among segments.

To the first point, even though the market researchers had made a conscious choice to not include behavioral patterns in the cluster analysis, they did not make this clear anywhere. Segment profiles that they published included descriptions of demographics, attitudes *and* usage – but nowhere noted that survey items asking about behavior had not been entered into the analytics of clustering. In our ongoing discussions with our market research colleagues, they appeared to assume that purchase driver attitudes would predict actual behavior. In any case, to those of us accustomed to the previous segmentation, the segments were still very much the same – same name, same key characteristics, just new and growing sizes. This was completely misleading.

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[4] Imagine that you are betting on a card drawn at random from a deck that has one extra King. You would be wisest to bet that the card will be a King, even though there is a much higher probability it will be something other than a King.

We also began to inquire in more detail about the inner workings of the algorithm for the typing tool. One thing that became apparent was that the decision rules incorporated into the algorithm were completely opaque. The vendor who developed the segmentation and the tool eventually acknowledged that the algorithm was so complex, with so many "trigger points" where differences in patterns of responses would kick someone into a different segment, that it could not be summarized intelligibly.

After we fully realized the extent to which things had changed inside the 'black box,' and consistently challenged the market researchers on the implications of this change for the business, their language around the typing tool began to also subtly change. They acknowledged that there was overlap among segments and that some people were 'core' to a segment, while others were more on the fringes. We were told that we should look for people that have ONLY a high probability in one segment, and not to recruit people who had probabilities bordering on more than one segment. Unfortunately, based on our recruiting efforts, this appeared to be a minute percentage of the population

Additionally, our market research colleagues' language about what being placed into a segment actually meant began to change. The determining questions for placing a person in a segment were about the importance of factors in choosing their *current* mobile phones. However, our qualitative research showed a number of cases where participants' current phones did not even have the functions they rated as highly important. When we pointed this discrepancy out to our colleagues, they argued that these people were thus answering the questions aspirationally and therefore still mapped to that segment (with the underlying assumption that they would likely move into that segment with the next purchase). We disagreed, and argued back that having some people answer the questions based on current purchase drivers and others based on future purchase drivers inherently skews the data. It seemed to represent an effort to hang onto the idea that purchase driver questions would in some way predict behavior. Our protests were met with shrugs. So while the black box remained impenetrable, insights gained by our qualitative research began to make evident very clear ways in which the current model provided skewed data.

EPILOGUE: PLAYING TOGETHER

[Reprise] The three market researchers who collectively owned the segmentation—with whom we had a longstanding, collegial relationship—soon joined us in the Greenhouse. Six of us clustered around the table in the richly cluttered data room, while Tracey moved around on foot to point out photos of 9 different participants as we recounted their stories. For each participant, we orally painted their portrait: "Joan is 41 years old, lives with her husband and daughter, and owns 2 small businesses, a sandwich shop and a flower shop. She is planning to buy a new phone as soon as her contract is up, likely a BlackBerry. It is important for her to try to always answer calls because …" At the end of each story, we asked our partners to privately write down what segment they thought that person classified into, before sharing them openly and discussing.

As we had anticipated, their answers were incorrect far more frequently than they were correct. Several times, each researcher had a different estimation of the appropriate segment for a participant. But often, they all agreed on what segment the participant seemed to represent. In general, they were quite confident in their guesses. In the end, our colleagues assigned a wide range of different segments to the 9 participants. Then we pulled the surprise out of our hat: all 9 of these people had been classified into the same segment by the algorithm-based typing tool. A new light of understanding began to shine in their eyes. By the end of the game, we had reached a shared understanding of the challenge that lay ahead of us all: how to come to terms with the fact that this segmentation that the organization had invested in and bought into didn't accurately classify people according to its assumed lines of differentiation.

GETTING INSIDE THE BOX: THE NEXT EVOLUTION OF OUR SEGMENTATION

Our story doesn't have an ending, yet. Partly as an outcome of what we share here, the segmentation model in question was fully retired and we launched a highly collaborative effort with our market research colleagues in building and defining a new segmentation. This is still in process, and we are optimistic that within a few months we will have a happy ending to our story. We would like to close by sharing with you some of the lessons we have learned and are now putting into practice in evolving our business' segmentation model:

Get inside the black box, and know thy segmentation factoring. During the update of our segmentation we blindly trusted the process and did not take the time to properly educate ourselves or ask probing questions about procedures. Even though our key competency is qualitative research, we found that it was essential for us to have basic knowledge of segmentation methodologies. Therefore the primary lesson for us is that we must take an active role in understanding segmentation methods and processes. You may have to educate yourself in fundamentals – as we have had to – or hire someone to work with who can deeply explain to you the pros and cons, and not just sell you the solution. In addition, be sure to ask questions along the way and do not settle for ambiguous answers or deferral to the vendor. The people in charge of the segmentation should be expected to be able to explain the details.

Be part of the core working group. In addition, when the segmentation update occurred we were not part of the small team that owned the decision-making process on how to approach the update or how to communicate the outcome. Thus, a key learning for us has been to ensure participation in the core segmentation working group. Most segmentations are created by a team, not by a single individual, and industry-wide it is increasingly accepted that the most successful segmentations are created by a group of people from different disciplines and teams (Bortner, 2008). If you are having difficulty gaining access, two tactics that we have found to be compelling are carving out some official accountability for segmentation deliverables and/or offering money to co-fund the segmentation. We have established a stronger position at the table by owning and funding components of the next segmentation. If this level of participation is not possible, you could become a reviewer, stakeholder, or extended team member of the work.

Incorporate behavioral factors in the mix of potential determinants. The removal of behavioral patterns as a factor to determine the updated segments, in the end, caused a breakdown of the validity of the segmentation. As behavioralists, it did not occur to us that our colleagues would even consider removing behavior, and it has been surprising to us that some current segmentation guidelines still advocate for attitudinal variables over behavioral variables, going as far as calling behavior "backward-looking" and attitudinal "in many ways, perfect" (Bortner, 2008). So the key lesson for us has not been the importance of behavior as a segmentation determinant, but to ensure that behavioral factors are included as potential segment determinants (especially if you are engaged in product or service development). However, we do not believe that behavior should be the only determinant, perhaps not even the predominant. The strongest segmentations are often based on multi-dimensional factoring of attitudes, behaviors and aspirations/values.

Segmentation definition should include quantitative and qualitative inputs. Our original segmentation was defined solely with quantitative data, and our qualitative research was executed as a follow-up study to 'better understand' rather than to 'help define' or 'validate.' However, it became clear that our earlier work had been a key component in the success of the original segmentation and also provided critical insights to understanding why the updated segmentation was not accurate. We have learned to ensure that qualitative research is embedded as a component of segmentation definition. Qualitative research should ideally be included in both the front-end and back-end of the quantitative research. Qualitative outputs should directly influence development of quantitative tools, factoring decisions, and clustering decisions, such as to understand interpretations of questions and the range of answer choices to test the survey; to validate quantitatively defined segment clusters; to test the typing tool screener; to help define cluster interpretations; to help decipher which of the zillion data points are significant in distinguishing segments; and to gain a deeper understanding of the who, how & why of the segments.

We have learned valuable lessons across this segmentation journey – most importantly about our own accountabilities around ensuring more rigorous integration of qualitative and quantitative methods in the process. We have long created impact in our organization by representing the 'voice of our users' through rich storytelling and model development but learned that our success at positioning ourselves as storytellers can also limit our authority in contexts where numbers are valued above all. Through this journey we were able to break through some of these boundaries, and have forged a deeper working relationship with our market research colleagues, gaining mutual respect for our respective training, perspectives, and contributions in building a strong segmentation model for the business.

NOTES

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"Let's bring it up to b flat" -- What Style Offers Applied Ethnographic Work

RICK E. ROBINSON
Research Fellow, Continuum

Ethnographic and design work share, deeply, the challenge of conveying the truth of the work we do to interlocutors from very different backgrounds. Writing is hard work even with the shared culture that an academic discipline or a single firm can draw upon. How then, to write well for a broad audience? For varied audiences? By writing like novelists. Literary critic James Wood encapsulates the central tradition of the novel as: "Truthfulness to the way things are [...] Life on the page, life brought to different life by the highest artistry." (p. 247) It is hard to conceive of a better description of what most of us would like to achieve. "Truthfulness to the way things are" gets nicely to all of the important moments of what we do—observation, description, interpretation, inscription. In this paper, I try to move 'style' up the ladder of importance in how we think, write, and talk about the work we do.

WORKING WITH STYLE

How hard is it to convey the essence of the work we do? I'm talking here about particular instances of work, work in projects, in cases, in fieldwork and findings, more than the more generic process, method, and overview blurbs and slideshows that get used to 'sell' or introduce the work. It's hard. We rely, often, on close collaborations and shared experiences to bridge across organizational boundaries and disciplinary backgrounds. We don't expect folks to "get" the work by reading a report, and probably with good reason. At last year's EPIC an entire session was devoted to rethinking representations of our work in media and practices other than writing (Sunderland, 2008). Writing's role in our work sometimes seems like an ancillary skill. There are of course the bullet points in the PowerPoint files and the notes which accompany talking-head video snippets and internal 'DO NOT CIRCULATE' research reports. Occasionally a case study will find its way to a company website, comprised of the (unfortunately) near-standard formula: problem-method-insight-solution, "real people," and a product glamour shot. And there are the four years of EPIC and its proceedings, which, for as good as both are, are still a long way from the scale and variety of the AAA or ACM journals and proceedings. I'm willing to go a bit retro in this paper and suggest that writing, more than anything else, continues to be the most important vehicle for communicating among ourselves and especially, to wider audiences and other interested parties.

Discussed in person, and for some researchers presented from the podium ethnographic research work comes alive. But as a rule with few exceptions, it is hard to say the same of research writing. Picked, not quite at random, from an EPIC proceeding (2007):

> Our research objectives were to uncover the needs of non users in the low income community, how they might use or adopt mobile and Internet services, and how to design technology based on people's needs, constraints, and aspirations.

This is not "Call me Ishmael." Nor is it exceptionally bad. It's normal for proceedings and journals. We learn to write this simply and clearly, this unostentatiously. We are, for the most part, taught to avoid "Call me Ishmael" in professional writing, to understand style and personal voices as violations of the objective, scientific frame. Were we only reporting results, there would be good reason for such a limitation. But we aren't only reporting. We are creating alternative interpretations, opening up ways of thinking differently, imagining new futures. We have good reasons to understand what style brings to communication and to learn to work with it in the work we do.

We can do better than reportage. We *should* do better, not only for ourselves and for the field, but for those for whom we create the work in the way that we do; for the participants whom we must respect, and for our 'clients,' whether internal or external, immediate or imagined. There are other models out there which can help with this. And peer-reviewed science journal writing is not at the top of that list

WHY "HOW FICTION WORKS" WORKS

Last year, I had occasion to remain prone for most of eight weeks, during which time I read a lot of fiction, watched a lot of movies, and listened to a lot of music. I came out of that with a renewed energy for work that I could not put down to the surgeon or the medications. A month or so after that, however, I began reading literary critic James Wood's "How Fiction Works," (2008) and light broke through the clouds, bells rang, pennies dropped, and scales fell away. It is a brilliant little book. It is, as one might expect, beautifully written; at once authoritative, playful, and subtle. Smart. It made me think differently about much that I had already read, and sent me to the bookstore to find the novels I'd passed by. But I carried it around, dog-eared its pages unmercifully, and underlined it with the abandon of a first year graduate student, because I read *How Fiction Works* as a figure of thought, an analogy for much of the work that we do. It made me think, hard, about why research reports don't absorb you the way that fiction does, about why we rarely sing at conferences. In the reading and watching and listening I'd done I was often moved, but hadn't thought very deeply about how and why that was. What Wood brings beautifully to the fore is that the core of the novel isn't its fictive or imaginative nature, but the way in which *style* particularly connects reader, author, and character. How that works for the work we do, is the focus of this paper.

Wood is a scholar-critic. He isn't writing a "how to" for novelists, but rather elucidating both why some fiction is so much better than others, and how the technical means to make it so have developed over the history of the form. The "Works" in the title is as much evaluative as it is mechanical. Wood's encapsulation of the central tradition of the novel is the grounding analogy for me:

> Realism, seen broadly as truthfulness to the way things are […] cannot be mere verisimilitude, cannot be mere lifelikeness, or life sameness, but what I must call *lifeness*. Life on the page, life brought to different life by the highest artistry." (Wood, 2008, p. 247 emphasis original)

Replace "realism" with "ethnography" and it is hard to conceive of a better description of what most of us would most like to achieve in our work. "Truthfulness to the way things are" gets nicely to all of the important moments of what we do—observation, description, inscription, interpretation. But in that last, crucially active phrase, "brought to different life by the highest artistry," there is perhaps more room between author and page than we are comfortable with as scientists, as researchers. Most of "How Fiction Works" is focused on that gap, for although the creation of a slight mismatch between what character or narrator understands and what the reader should understand is the very definition of irony, (according to Wood, at least), it is also where style is embodied, where the work of fiction "triples" to encompass reality, its immediate perception, and reflective commentary on both of those.

I'd like to move 'style' up the ladder of importance in how we think, write, and talk about the work we do. Like most of my generation, I was trained to understand 'style' (in writing, at least) as something to be followed, to be adhered to. First, Strunk & White's "*The Elements of Style*", then Kate Turabian and the "*Chicago Manual of Style*" as finishing school. Turabian was, after all, the head of my university's Dissertation Office, through whom every thesis and dissertation – whether in Cosmological Physics or Cognitive Psychology, had to be processed, scrutinized, and approved. Style in this sense isn't connected to 'reality' but to readability, to enabling communication through formal standards. I am not suggesting that we abandon good punctuation or citation formatting (and why, after all, would we? There are free websites such as bibme.com that will take a fragment of a title, hunt it down, and format the citation in APA, Chicago, or MLA style in less time than it took to write this parenthetical observation). Style in the sense Wood intends does something different for us. Wood's question, "What distinguishes great work from grinding genre prose?" seems perfectly applicable to the work of research communication.

Wood opens up a different approach to how we write about the work that we do, how we "get down to business" among ourselves and for all the readers we *could* have: the notion of *style* applied to the work of ethnographic description and communication. Wood's book provides us with a clear and often beautiful set of constructs for not only understanding "how fiction works," but also to see the gap between simply conveying "findings" (our version of basic genre prose) and great writing. I think it allows us to see how the work of design and the work of understanding are, in ways both substantive and formal, creative. It provides us the structure and the latitude to do more with our material.

This paper is an examination of what the notion and the elements of style can do for ethnographic communication: an argument in support of doing the hard work of communicating not just with clarity and fidelity, but with some of the flair, imagination, and voice of the best in fiction.

IRONY AND STYLE

Irony is usually a subject of investigation; a topic, a potential explanation. Wood offers it to us as the central structure of style, and through it, an intriguing notion of discriminating reading and writing. For me, Wood reclaimed irony from the reduced circumstances it found itself in after the debilitating period of time it spent linked to consumption in the '90's. Shockingly, it seems that the work of irony is not always wry, or mocking or superior, nor was it invented only late in the last century.

> "[In] free indirect style, we see things through the character's eyes and language but also through the author's eyes and language. We inhabit omniscience and partiality at once. A gap opens between author and character, and the bridge—which is free indirect style itself—between them simultaneously closes that gap and draws attention to its distance. This is merely another definition of dramatic irony: to see through a character's eyes while being encouraged to see more than the character can see." (Wood, 2008, p. 11)

Especially wonderful is that Wood follows this definitional passage immediately with a perfectly chosen example not from Don DeLillo or David Foster Wallace, but from Robert McCloskey's classic children's story *Make Way for Ducklings*.

> McCloskey places us in Mr. Mallard's confusion; yet the confusion is obvious enough that a broad ironic gap opens between Mr. Mallard and the reader (or author). *We* are not confused in the same way as Mr. Mallard; but we are also being made to inhabit Mr. Mallard's confusion. (Wood, 2008, p. 12, emphasis original)

"To inhabit Mr. Mallard's confusion." I think this is when I began to understand that *How Fiction Works* is if anything, larger than its immodest title suggests. Wood characterizes the tension between a represented reality, the experience of that reality (by characters & narrators), and the interpretation of the whole which we read in the discrepancies or the parallels between the two, as the ground upon which style builds "life on the page, life brought to different life by the highest artistry." Irony, understood this way, is what creates the tension that holds a novel together. The figures which create an "ironic gap" do double duty, encoding a part of at least one reality while they point to a gap between it and other positions in and outside of the work itself.

Isn't this what we purport to offer to our clients, to our audiences? A level of understanding the subject that is so close as to "inhabit" their way of being in the world? Coupled with a way of reaching directly for our clients, knowingly and carefully bringing confusion (or joy or shame or habitualness) to life for them? Allowing them to consider it, know it, and ultimately, to value it, respect it, even as we offer to change it?

The different ways in which that structuring and skinning gets done are the 'technologies' of the novelist. I'm not suggesting we appropriate them wholesale. But the clarity of the relationship between the elements of style Wood illuminates can certainly be a model for the delivery of ethnographic work to design, business, strategy, product development – any of our central audiences. Understanding and reflecting on the tensions between reality and its perception: if that is not our business and our value, I'm not sure what can be.

Issuing some sort of edict—"Write with style!" is not particularly helpful. The style guides we (ought to) keep ready to hand while we write are probably less than half of the vocabulary we need to master. The constructs of our disciplines are another. And the concerns of our clients and the language they use to express them are more yet. Style is not, in the way I'm reading Wood here, reducible to any of those. Let's think of style, in our context, as the control and expression of ironic tension. That kind of style is clearly more than either individual expression or flair devoid of substance. It is instead, a kind of structure, a requirement, a framework requiring that we give each of those tensional corners clear and distinct treatment: in detailing in what this particular reality consists; in the curation of specific and consistent voices for the characters we represent; and finally, in the development of a voice for the person, the team, or the company behind that analysis – one specific to the research goal(s), and which is clearly rooted in-- and articulates if need be -- the values which inform every research undertaking.

But I think it important to look briefly at why we haven't been working more explicitly with the notion of style all along. An omission particularly odd in a field that counts design and designers as both central practitioners and important interlocutors.

WRITING, READING, AND STYLE

The blurb from the *New York Times* on my 1979 copy of *The Elements of Style* says, "Buy it, study it, enjoy it. It is as timeless as a book can be." Reading it again, I found this bit to be especially timeless:

> The special vocabularies of the law, of the military, of government are familiar to most of us. Even the world of criticism has a modest pouch of private words (luminous, taut), whose only virtue is that they are exceptionally nimble and can escape from the garden of meaning over the wall. Of these Critical words, Wolcott Gibbs once wrote, '...they are detached from the language and inflated like little balloons.' The young writer should learn to spot them -- words that at first glance seem freighted with delicious meaning but that soon burst in air, leaving nothing but a memory of a bright sound. (Strunk & White, 1979 pp. 83-4)

"Escape from the garden of meaning over the wall." We have more than a few of them: once-useful terms such as "text," insider turns of phrase like "always already" and maxims like "speak truth to power" have been sanded very thin by master and apprentice writers alike. Granted, most have not been so harshly abused as to be entirely empty (or empty *and* wrong as, say, how "fleshed out" is constantly rendered as "flushed out" in business jargon), but we are close to it in this field's most completely burst term, insight. Strunk and White included *insightful* in the "Words and Expressions Commonly Misused" chapter with the following note more than 50 years ago: "The word is a suspicious overstatement for "perceptive" … usually, it crops up to inflate the commonplace." (p. 50). Despite that warning, there are entire corporate departments denominated with some form of the word insight, and the gods only know on how many PowerPoint slides the word appears (One need *not* be a god to find that it gets half a *billion* hits in search engines).

What happens when all of the useful language has gone over the wall? We get what Wood wonderfully calls the "ruined argot" of a debased language. In trite phrases like 'user need' or 'consumer insight' we are dangerously close to ruining our argot, despite the equally dangerous fact that we haven't yet fully developed it. The style figure gives us an option other than ascribing this to bad writing or a lazy sink into marketing jargon.

I began work on this paper with the idea that it would be about bad writing. I started to work through conference proceedings and abstracts looking for papers that bored me or that bulged with jargon and trudged unhappily along with voiceless, monotonous, prose. I know that I've skimmed many a journal page and written, under the guise of note-taking, letters to my college roommate in the rows of a conference auditorium – so I was sure bad writing had to be there. But it wasn't. Or at least not much of it. It takes work to find really awful work in the proceedings and journals for this field. But the good writing is good writing within, as Wood has it, "a single register," and that register is the personless objective voice of most research writing and of academic journals. Rather than bad writing, it seems that the style question, at least in part, is a question of audience, of the readers we imagine. A painter friend of mine recently told me that she finds grant applications difficult because there is no clear person for whom she imagines writing them (In an academic journal, I'd have to footnote this as a dated personal correspondence). That's the core of it. In a slightly paradoxical fashion, exceptionally *good* writing such as that in Genevieve Bell and Paul Dourish's collaborations make this more clear than bad writing does.

Compare:

> In the urban sphere, the user is pitched against a hostile world; in the domestic sphere, people find and celebrate a nurturing environment. […T]echnology has a lot of hard-wired assumptions about where danger lurks in our complex world. To us, that seems dangerous. (Bell and Dourish, 2006, p. 39,)

With:

> In their work on information infrastructures, Bowker and Star [41] discuss the International Classification of Diseases, a common infrastructure for the collection and comparison of mortality statistics worldwide. Like other boundary objects [42], though, the ICD is less a stable platform upon which everyone can stand, and more a means by which different interests, groups, concerns, and activities can be brought into temporary alignment. (Bell and Dourish, 2007, p.8)

The first is for the (quite cool) design/engineering magazine *Ambidextrous*; the second, for the peer-reviewed journal *Personal and Ubiquitous Computing*. Could you tell? Of course you could, even with the nice little ironic entendre of 'platform' in the journal quote. In the magazine article, the tone is different, the language warmer (despite the topic). In it Bell and Dourish are present and they have opinions. In the second; they recede behind cool objectivity and lots of citations.

We come to this honestly. In the opening chapter of *The Pleasures and Sorrows of Work, (2009)* Alain deBotton writes about the passions of "Ship Spotters" who keep detailed records of observations of the comings and goings of cargo ships in major ports around the world.

> In converting a passion into a set of facts, the spotters are at least following a pattern with an established pedigree, most noticeable in academia, where an art historian, on being stirred to tears by the tenderness and serenity he detects in a work by a fourteenth-century Florentine painter, may end up writing a monograph, as irreproachable as it is bloodless, on the history of paint manufacture in the age of Giotto. It seems easier to respond to our enthusiasms by trading in facts than by investigating the more naïve question of how and why we have been moved. (deBotton, 2006, p 27)

Style, I think, requires that we do not bracket the passions we find in our work; that when we are stirred, when we observe the stirring, we make space for it in how we write. Writing for an academic audience removes, implicitly, the opportunity to create characters and implies that the authorial viewpoint is an objective one, a scientific one, rooted in description and shying away from the explicit expression of values, or the imagination of futures. The first move in developing styles for our space then, is to considerably broaden the notion of who our readers might be.

STYLE AND REALITIES

> One way to tell slick genre prose from really interesting writing is to look, in the former case, for the absence of different registers […] a style that is locked into place. By contrast, rich and daring prose avails itself of harmony and dissonance by being able to move in and out of place. (Wood, 2008, 196)

We do not have the option of inventing the reality we write about. But the requirement that we stick to what is true does not put the ability to be 'really interesting' or 'rich and daring' out of reach until we switch careers. Non-fiction has its share of writers with enviable style: Atul Gawande's *Complications* (2002) Tracy Kidder's *Mountains Beyond Mountains* (2004), and deBotton's "*Work*" book are all essentially ethnographic works; closely observant, broadly and deeply informed, and intelligently interpreted.

Gawande and Kidder both have 'characters' around which the books cohere. In *Complications*, it is Gawande himself, although other physicians and patients are as vividly drawn as are his own experiences. Opening up the specialized vocabulary of the profession to a wide audience, Gawande enables readers to inhabit the confusion and the cares of a surgeon, just as McCloskey did with Mr. Mallard. Kidder, on the other hand moves back and forth between his ostensible 'subject' Paul Farmer, and himself. Farmer's work and passion infects him, moves him from reporter to something more than that- a witness perhaps- but in any case, we understand that Kidder has changed, seemingly as we read. In Kidder's conveying of a life's work first hand, we understand Farmer but also Kidder himself, and how Farmer brings Kidder to 'inhabit' a different stance toward the world.

For some time, one of the points of tension between some of the constituent groups in applied ethnography has been the relative importance of being a first person observer in primary research, of being able to vouch for the verity of an observation by saying, "I was there." What I think goes wrong with this well-intentioned stance is brought forward by the notion of ironic tension and style: when we choose from great mounds of field data the specific informant's words which convey the researcher's findings, we are collapsing at least two if not three points of view into one. Quoting a participant with "I like to read and sometimes send a text" immediately after one writes, in the academic objective voice: "People are reluctant to enter information into devices, or to learn new skills," is at the least, redundant, and somehow disingenuous, giving subject and author the same voice, having one speak through the other. "I observed" or "we noticed" are *not* the same as "he said." And they are not, either, "It was troubling to me to observe" or, back to Bell and Dourish, "To us, that seems dangerous."

The worlds of our subjects *are* strange. It is the very distance between our clients' ways of seeing the world and way it is understood and experienced by, as Jean Lave (1988) so plainly put it, "just plain folks" that makes the work we do valuable. In collapsing voice into findings, in searching talking head snippets for the moment which provided 'the insight,' we take out both the richness of style and the values that might live in the distinctions between those differences.

If writing of the "Our research objectives were to uncover…" variety is not "Call me Ishmael, neither is it "They set a slamhound on Turner's trail in New Delhi, slotted it to his pheromones and the color of his hair." the opening two sentences of William Gibson's *Count Zero*. Gibson is often cited for the effectiveness with which he invents future realities, realities in which we nod along in appreciation of the truthfulness of the social, technological, and psychological dynamics on which the novels are laid, even as we are astonished by the elements he creates to populate them. Whether it is the distant future of *Neuromancer* or the eerily and indeterminately closer worlds of *Spook Country* and *Pattern Recognition*, Gibson does for a future what Dickens or Flaubert or Proust do for their contemporary or near-contemporary worlds: inhabit them fully while just as fully subverting them-- critically, lovingly, but still creating just that slight shift that lets us see the difference between reality and what could or, more powerfully, should be.

By the end of the first five or six pages of *Count Zero*, the alternate reality is completely immersing without a sentence that is uninflected and omniscient. Simple descriptions embody the tensions of the style Wood calls "free indirect style:" "Something Midwestern in the bone of the jaw, archaic and American" (p. 3) or "how she lived alone in one of the ramshackle pontoon towns tethered off Redondo" (p. 4) They open the distance not between an innocent character and a knowing reader, but between the world as we know it and a potential future as Gibson has imagined it: the archaic jawline, the tethered town—words and images that are neither burst nor empty. Gibson sets up the rules for an alternate future and then plays by them. It isn't just Gibson's imagination we should be excited by, it is the discipline with which he takes premises laid down in our social and technical reality and develops them in ways not at all necessary or obvious. It is the kind of subversive act of art that Herbert Marcuse (1978) put at the center of critical understanding.

Fiction is the narrative imagining of invented worlds. We are not in the business of inventing data, but we are in the business of imagining futures every bit as much as we are in the business of representing realities. How we choose to do those is a matter of voice and values.

STYLE AND CHARACTER

Bell and Dourish (I'm making them stand in here for a--not insubstantial, but still a minority-- of writers in the field) can and do shift voice and register depending on their intentions, the context and on the readers they imagine. This isn't waffling or unscientific of them. I'd probably rather read the prose of the *Ambidextrous* piece, but my trust in them as researchers is predicated on their corpus of journal articles and on knowing them, hearing them speak at events like this one. We are, variously, researchers, designers, and strategists. And also students, parents, confused car shoppers and *fashionistas*. We don't need to hide these various and varying identities, but we do need to understand the role they play in the work that we are doing. A character can be how we control who we are and who we need to be in a particular piece of research work or its communication. Shifting domains slightly, I think Alain deBotton characterizes this consideration perfectly in *The Architecture of Happiness* when he begins his reflection on how we are affected by our surroundings with,

> Belief in the significance of architecture is premised on the notion that we are, for better or for worse, different people in different places—and on the conviction that it is architecture's task to render vivid to us who we might ideally be. (2006, p.13)

In design and design research, it is not an uncommon practice to create "personas" as vehicles for conveying fieldwork (and personal experience) to clients and project teams. While in general, the sophistication of persona representations has come a long way from the twentieth century ad agency practice of creating mood boards out of images and words clipped from magazines (many of which had been created by "creatives" looking at mood boards), they are still shallow, simplified, and static when compared with the imperfect messiness of just plain folks. Like just average academic writing, they are characterized by a lack of multiple registers and a decided absence of tension. Again, we can do better. Quotes and talking head snippets of video don't bring subjects to life as characters. They point at the distance without ever enabling the 'habitation' of it. Style requires not just a voice, but a deep appreciation of other voices, even as that original voice frames and stands off from its partners.

I have a friend who is a writer (another personal communication, n.d.). Right now, he is working on a collection of short, lyrical essays that hover between memoir and poetry. All of them are written in a very close first person, and all of them are 'true': I know because I am a character in a few of them, and they startle me always with how much I'd forgotten, but how recognizable those forgotten things are. So it came as a surprise to me that he talks about how difficult it is to create the right voice for "the narrator." Not "me" but "the narrator." He is working with "the truth," but he is careful to step away from reportage and neutrality, taking the care to create the two clear voices, and the relationship between them. Ironic structure, bent to the creation of value. The hard work of style, for the payoff of communication of reality.

Wood talks about a number of techniques (or 'technical advances') which create the tension between author, character and narrator. One central one, which he argues was invented or at least perfected by Flaubert, is the notion of a "*flaneur*", a character whose main role is to notice things:

> This figure is essentially a stand-in for the author, is the author's porous scout, helplessly inundated with impressions. He goes out into the world like Noah's dove, to bring a report back. The rise of this authorial scout is intimately connected to the rise of urbanism, [...] to the fact that huge conglomerations of mankind throw at the writer – or the designated perceiver—large, bewilderingly various amounts of detail. (Wood, 2008, p. 48)

The "designated perceiver"—how incredible a role is that! And how close the notion of "large, bewilderingly various amounts of detail" to the experience of trying to bring some order to a roomful of fieldwork documentation. But rarely do we allow that bewilderment to show through in research reports. "We don't know yet," does not seem to be an acceptable response to bewilderment, even when it is true. Reading reports, case studies, and proceedings, one would think that we are a profession of perfect perceivers; that we have no confusion for our readers to inhabit. Unfortunately, what we rule out along with bewilderment and confusion are the values that shape everything from how we conduct the fieldwork to the conclusions we draw and the recommendations we make to colleagues and clients. Instead of our own voice, we substitute an objective distance. Our *flaneur* explains instead of noticing. As if by removing all the first person pronouns, the author's voice is magically removed, leaving objectivity. Yet from St. Augustine to Stephen Jay Gould, the combination of clear, critical thinking with passion, with personal experience and explicit values, has created work that is as stirring as it is persuasive and reasonable. Style is reason's partner. It does not need to be stripped away to let objectivity and truth come through. What the work of fiction does, or at least that the intelligent criticism of it proposes that it does, is to show us how to craft a distinct voice for both character and author, and define the relationship between those voices in the work of creating the narrative. Maintaining that relationship consistently is the work of style.

FIGURES AND IMAGES

Almost a decade ago, Tony Salvador opened a talk at an interaction design conference with a very simple line drawing of a daisy-like flower. Tony is, I'm sorry to say, only slightly better at drawing than I am. I remember it not because of its stunning artistry, but because of how perfectly it worked as the underlying structural metaphor for his talk, and more importantly, for the experience of the folks he and his colleagues had studied in an extensive, multi-sited ethnography.

As a field, we use metaphors, similes, and analogies constantly: consumers "journey" through life stages or car purchases, and so many everyday activities are presented as "cycles" that the newest version of PowerPoint can turn any list into a broad–arrowed and brightly colored cycle at a click. But we tend to use them in specific and isolated forms. To make specific points, rather than to create structure or invest a report on work for hire with style. Salvador's "Flower of Spain" figure did more than that because it was the figure through which an Intel Corporation organization, specifically interested in inventing and applying new technologies, made sense out of hundreds of hours of observation, interview, and conversation. It connected the seemingly mundane (average area in square meters of urban apartments, the making of coffee, running up of tabs) with the core of the participants' experience in a way that made the distance between Santa Clara or Hillsboro and southern Spain something understood rather than measured; that provided both research team and readers with something to think with.

In *Mountains Beyond Mountains*, there is a recurring image that does much the same kind of work for Kidder, but which is selected, chosen, from the years of interaction between the two men, rather than one created by Kidder as explanation. Paul Farmer is a physician and researcher whose work is global and epidemiological; who has tackled the societal factors contributing to epidemic diseases both by reframing the medical understanding of "resistance" (in more than one disease) and by mobilizing organizations on the scale of the United Nations, the World Bank, and the pharmaceutical industry to take action in dozens of countries, at enormous levels of expenditure.

But several times a year, crammed into short holes in crazy global itineraries, Farmer returns to Haiti and goes to see individual patients, in their homes. The hike to see two patients which Kidder describes in most detail takes 11 hours. Of hiking.

It is a journey between two worlds, and a metaphor which works on many levels, which Kidder returns to deftly throughout the book. Farmer doesn't just move between rural Haiti and the centers of global policymaking, he connects them. By walking from one to the other, and taking what each gives him back to inform the other. In that journey, we can see starkly the complex relationship between economic and political structures and an individual illness, recovery, or death. The real hike is used not only to re-register our way of thinking about something removed from our reality --how many of us know someone who has died of tuberculosis?-- but to make the role of an individual interpreter's re-registering as vivid as any fictional one. Through that shift, Kidder hands his readers responsibility and a moral choice: knowing that a different reality is possible, and is within the realm of individual agency, we choose between doing nothing and doing something.

Making real events do the work that a brilliantly imagined metaphor can do as well as this one does is no mean trick, but it is work. In ethnographic research and in design, representations, models, and frameworks are often metaphorical. My point here is not just that they could be more so, but that in writing to create the distinct tensions and voices between what is, how our subjects understand that, and what *ought* to happen, we can create in compelling style, as well as in truth. As Wood has it, "in cases like this metaphor is doing what it is supposed to do; it is speeding us, imaginatively, toward a new meaning." (p. 204)

CONCLUSION, WITH MUSIC

I've been approaching the notion of style mostly from the point of view of writing and writers. Considering the work (in all the senses I've been using it) as it is embodied by authors in communications on the scale of talks, articles, and books. But I think that there is more potential for the idea of styles than what I've glossed so far. Again, Wood started me on the particular approach to the issue, but it is one that the social sciences and the design world long considered—the idea of practice and the related notion of communities of practice. The development of the novel and in particular the development of "free indirect style" is an historical and, as the *flaneur* passage shows, also a material evolution, with originators, experiments, students and masters.

In this strange little intersection between research, technology, design, and strategy, we haven't quite understood ourselves to be engaged in that same sort of social/technical search. It seems to me that the style notion We can develop distinct styles of analysis, differing sensibly between what we'd use for close interaction analysis and the ones we'd use to build a large strategic plan. Or that are identifiably of the voice and values of particular groups. We can begin to develop styles as different approaches to communication, representation, and value, rather than focusing on methodology. A basis for the evolution of the field in something other than methodology.

Music has both the kind of individual artistry that we admire in great writing and the sort of collective creation that we want from vital communities of practice. Like writing and corporate work, it has its share of hacks and dross to make great work stand out and be valued. It has for its entire history lived on the tensions between high and low, innovation and tradition, creation and interpretation, genre and canon. We can learn from style in music, too.

In 2006, Bruce Springsteen released *We Shall Overcome: The Seeger Sessions* which included a documentary of the album's making, and which was followed by a tour with 18 musicians playing at least 40 different instruments. The material underpinning the album is American, Irish, and English folk music, standards of the folk genre, long in the public domain such as "15 Miles on the Erie Canal" and "Jacob's Ladder." Springsteen and a group of musicians play it all not from scores, but from a combination of recollection, intent listening to old recordings (the "Seeger" part of the title is a recognition of folksinger Pete Seeger's decades-long efforts to find and record folk music and musicians throughout the U.S.), conversation, rough notes scribbled on legal pads, and trial and error. As Springsteen says to the camera at one point during the documentary, this is "music being *made*, not just being *played*. Which means that opportunity and disaster are both close at hand."

Fieldwork and analysis, done well are both a lot like that. We talk a great deal about opportunity, but we acknowledge disaster less than we should. It is a live recording of one of the songs, "*Pay Me My Money Down,*" that connects style back to communities of practice for me. The song probably deserves the appellation 'rollicking,' and is, like most folk music, noticeably subversive. You'd have to have a pretty tinny ear and no sense of humor whatsoever to not end up smiling at the political innuendo and singing along. Between the second and third verses, Springsteen leans back from the microphone and says to the band "Let's bring it up to b flat." There's a beat, and then the music brightens: *all* of it. 18 people, playing loud, hard, and fast switch from one key to a new one. It is the kind of virtuosity that makes you laugh with astonishment, the way that an amazing fireworks display can. And this moment comes from understanding style deeply, from exploring the space between the source and its possibilities. Springsteen brought together a group of talented musicians who were steeped in at least two traditions: one substantive (the music) and one performative (also music). What they do during the performances is not just improvisation or riffing, though they do that, but working within one style to extend a different one. The music doesn't recreate the choir loft or the campfire singing of its sources, but reinvents it, understands it anew, and does it in a way that connects, viscerally, with a new audience.

That's what a virtuoso research practice can do, *should* to, in getting down to its business. In literature and in music, style is not surface, not decoration. It isn't in the work we do either. Style is commitment, is passion. We work regularly in that 'ironic tension' between reality, experience, and intelligent analysis. And if it weren't so limiting "Life brought to different life by the highest artistry" could be the tag line for our industry. After all, we're bringing the future to life too.

NOTES

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The Montage Workshop – The Recreation of Realization

ASTRID SØNDERGAARD
The Alexandra Institute

JOHANNE MOSE ENTWISTLE
The Alexandra Institute

This paper argues that we need to rethink our way of representing ethnographic data within user driven innovation processes (hereafter UDI process) in order to ensure that the complex life worlds of users inform the entire technical development process. To ensure this we argue that:

1) *We need to re-create the process of realization of user complexity that the anthropologist goes through in the field and engage our technical partners in this 're-creation of realization'.*

2) *To meet this challenge we have sought inspiration within filmmaking and based on the principles of filmic montage theory we have developed 'the montage workshop'.*

3) *This method challenges the way we handle and represent ethnographic data to technical partners and by doing so it also challenges the current roles of anthropologists, technical partners and users within a UDI project.*

INTRODUCTION: THE ROLE OF THE ANTHROPOLOGIST, TECHNICAL PARTNER AND USER

With this paper we wish to expand and nuance the role of the anthropologist, technical partner and user by experimenting with a new framework; 'the montage workshops'. In the montage workshop the anthropologist not only provides complex ethnographic material about the users, but also facilitates and frames a UDI process[1]. In this UDI process the workshop participants (technical partners) are given the opportunity to go through a similar

[1] We define UDI as active and close involvement of users throughout all stages of product development

kind of realization and knowledge producing process about the complex life worlds[2] of the users, as the anthropologist does in the field. We argue that in the montage workshops the participants experience, realize and gain ownership over the complexity that characterizes the world inhabited by the users that we seek to understand and involve in a design process.

The role of the anthropologist in the UDI process has traditionally been, and still often is, as data collector, user reporter, expert and/or mediator between users and research partners (see Hughes *et al*. 1993). The technical partners are given roles as comparatively passive receivers of the ethnographic account. This ethnographic account will be placed somewhere on a continuum from *thin* to *thick* description (Geertz 1973). Examples of this being the use of personas and other stereotyped and simplified user conceptions as ethnographic account. Or in the 'thick' end; the ethnographic monograph or the detailed and complex report, which may not be read and fully comprehended by all research partners in the industry due to time constraints, limited potentials of the textual form etc. (for an enlightening discussion of this viewpoint see Dalsgaard 2008).

The consequence of these scenarios being that user complexity may not inform the design process as intended. As opposed to some (e.g. Cramer *et al*. 2008), we argue that the challenge we are facing as anthropologists is not a mere challenge of how to report complex results about users to technical or design partners (for more on this critique see also Halse 2008), but is rather a question of rethinking the roles of the anthropologists, technical partners and users in the UDI process.

THE MCHA PROJECT

We draw on our experience from the project Minimum Configuration Home Automation (MCHA). The project aims to develop a wireless control device for private houses which makes it possible and relevant for people to monitor and control their energy consumption and thereby minimize their consumption and maximize their comfort. The project is a co-operation between the Engineering School of Aarhus, The Alexandra Institute, Develco Products and Seluxit.

The development of this control device is based on user driven innovation and the Alexandra Institute is responsible for designing the process of user involvement in the project. For this purpose an anthropologist is occupied full time on the project. The rest of the partnership contains engineers who are responsible for the technical development of the control device and the technical partners are all newcomers in the field of user involvement and user driven innovation. The project runs over two years from 2008-2010 and the

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[2] In our use of 'life worlds' we draw on Schutz and Luckman (1983) and understand 'life worlds' as a reality that is lived and experienced and thereby subjective. This subjectivity is constituted through embodied social interaction and is thus a result of intersubjective life (Ibid:1). In this case we focus on the complexity of concerns, needs and motivations that characterize each and every user in their everyday being in the world.

method experiment that we are referring to in this paper was carried out in the first half year of the project. We refer to the initial user involvement which had the purpose of giving the technical partners domain knowledge about the overall motivations and needs of potential future end users and at the same time providing the partners with an in-depth and shared experience of users and user lives as complex and non-reducible.

The Challenge

The methods used to gain insight into the users' life worlds are semi-structured interviews, energy tours[3] in the home, scenario-observations and cultural probes during a period of approximately three months involving 24 families. The initial interviews gave us a bearing on what might be interesting to further elaborate through observations and cultural probes. Interviews were either recorded on tape or on video, while energy tours and observations were all videotaped. The cultural probe consisted of a ground plan of the users' home, a camera and a diary The task was to draw their movements in the house on the floor plan, take photos of what their home look like in the morning and in the evening and also describe their activities in the diary.

The use of different methods resulted in collected data which was materialised in many shapes and forms (audio, visual, textual and material) each giving a different feel for and various perspectives on the complex life worlds of the participating users. We therefore faced the challenge of how to design a process that fully explored the potential of our various forms of data.

Another challenge posed itself in the initial stages of the project when we experienced that our various perspectives on complex life worlds of users somewhat clashed with technical partners' dominant perceptions of users as rational economic driven individuals. But how to share the bodily experience of being in the field and realizing these complexities with people who have not been there themselves and have limited time and resources?

MONTAGE WORKSHOPS

We set out to design a process which could meet these challenges and for this purpose we developed *the montage workshop* which is theoretically framed by montage theory within filmmaking and related to ethnographic filmmaking.

Dialectical Montage Theory

The theoretical framework for the montage workshop is based on the principles of Eisenstein's theory of dialectical montage within film making. Eisenstein saw the audience not as mere passive spectators but as co-creators and in his dialectical montage theory he

[3] An 'energy tour' refers to users taking the anthropologist on a tour of their home while telling about their daily routines and energy consumption.

worked with how the combination of juxtaposing film shots creates wholly new intellectual abstractions within the viewer's mind (Cook 1996).

The dialectical montage is created in the film editing where two juxtaposing shots are put together in a *collision* working as thesis and antithesis creating a new synthesis, a new meaning. The theory works with the assumption that the audience does not perceive the individual shots in the montage sequentially "but rather simultaneously, as if one were continuously superimposed upon another. That is, they respond not to an incremental or additive process in which each shot is modified by the ones which precede it (ABC is not equal to A + B + C) but to a gestalt – a totality or a whole which is different from and greater than the sum of its parts (ABC = x)" (Ibid: 170). In this manner the filmic montage also highlights the constructed character of the material, which shows us that what we are seeing is not "what is" but an explicit representation of a condensed reality (Suhr 2008).

Eisenstein's montage conceived the individual shot as *attractions* and thus working with montage is also working very consciously with the individual shots as attractions that are put together in a collision to achieve a specific outcome in the viewer.

Montage theory has also been used within ethnographic films and deals with the representational challenges in the ethnographic account. Traditionally film within ethnography was seen as a means to objectively represent "what is really happening" to the viewer through long and un-interrupted shots (Suhr 2008:10). From this point of view montage was seen as polluting the material and should be avoided.

This view is challenged by the visual anthropologist Christian Suhr (2008). According to Suhr the value of montage as a combination constructivism and realism lies within its possibilities to combine different shots from different angles, times and places and thereby creating visual experiences that are not possible from only the one point of view, which we as humans are limited to (Ibid:91). The montage "attacks" its subject from different angles thus resembling the process that the anthropologist goes through in the field gaining in-depth knowledge through comparisons of what is said and done, occupying different roles and adapting different methods (interviews, participant observation etc.). All of which provides her with a montage of many different perspectives on the object of interest.

In this way montage theory addresses our stated problem of re-creating the realization process for the partners in our project. At the same time it addresses the problem of representation which is continuously discussed within (visual) anthropology (see e.g. Marcus & Fisher 1999) - a discussion which is as relevant as ever with anthropology's presence in the field of UDI.

Montage Workshops vs. Montage Films

In developing the montage workshop we have taken the principles from dialectical film montage and translated and transformed them into a completely different form: as workshops in the UDI process. To clarify; this means that though we are talking about montage theory within films it is not the filmic material (e.g. videos of users) that is filmed and cut according to montage theory. We have taken montage a step further and created a whole realization process based on its principle. In other words we have developed 'montage workshops' instead of montage films.

This is done because the montage workshop enables, as opposed to montage film, inclusion of all our various forms of data and thereby provides the participating technical partners with multi-perspectives (Marcus 1994) on more levels than just contents, seeing that the workshop is also a montage of different forms of data (video, audio, text, drawings etc.). For this reason we work with our different forms of data as *attractions* in the same way Eisenstein conceived filmic shots. Furthermore; inspired by the potentials of the video card game (Buur & Søndergaard 2000) all of the video and audio data in the workshops has been made tangible by turning them into video- and audio cards aligning them with other tangible user data such as cultural probe material and present users. The participants in the montage workshop are engaged more actively than in viewing a film – they are immersed in the material and are actively co-creating new knowledge and tangible solutions based on the fragments they feel, see and hear and in some workshops present users also engage in the co-creation of tangible solutions such as mock-ups.

Just like the anthropologist gains insight into users' lives through actual and bodily presence in the field with the user, the montage workshop allows the technical partners to experience the users through the tactile – they are touching, listening and seeing the users and thus experiencing and realizing user motivations and needs in a different way than what is possible in a film. In this way the workshop form offers possibilities of both embodiment, realization and co-creation which we argue is the strength of the montage workshop.

The Structure of the Montage Workshop

It is particularly the assumption that juxtaposing attractions (shots) colliding in the filmic montage and thus creating wholly new intellectual abstractions within the viewer's mind that forms the basis for using the dialectical film montage as the underlying structure of the workshop. The assumption that putting juxtaposing attractions together as thesis and antithesis can create a gestalt or a whole that is greater than the sum of its parts led us to the theoretical starting point that we could conceive the different empirical material as such attractions and that put together they could in fact create a new synthesis in our technical partner's minds working as co-creators like the audience in the dialectical film montage. Our way of treating the empirical data is somewhat radical since we decompose the data into fragments and then reconstruct them arbitrarily in the montage workshop creating new complex montage users by fragments of many users assembled in the minds of the workshop participants.

The material in our montage consists of selected data from the field in different shapes and forms: video sequences from observations, audio from interviews, cultural probe material in the form of drawings of ground plans, photos and diaries, and last but not least the actual presence of users in some of the workshops[4].

In accordance with the dialectical approach to montage we have treated our empirical data as attractions thus fragmenting all of our material into attractions which are coupled in several new constellations in the workshops. The way the empirical data attractions are treated is corresponding to the theory of every shot having a dominant tone. The specific dominant tone in each data attraction that we wanted to emphasize was especially situations, statements and visualizations that somehow described and communicated values, motivations and needs of the users. Besides from the empirical data as attractions we also wanted to experiment with the actual presence of real users being 'attractions' along with the empirical data thus making empirical data from different users meet real users in trying to create new user complexes and gestalts in the minds of the workshop participants. This is possible because our data (including present users) is converted into "attractions" that can be put together arbitrarily and end up in different montages of user life worlds and combinations of needs and motivations.

THE MONTAGE WORKSHOPS IN PRAXIS

Our method is not developed for one workshop, but as a method for and framing of a whole UDI process. In the following we will explicate the use of montage theory in two different workshops.

Workshop 1

In preparation for the first workshop we transferred the empirical material from the fieldwork into selected attractions with specific dominant tones. To do this we worked through the various types of empirical data that we had collected and categorized it using the analytical concepts of *tradition of knowledge* and *concerns* comprising values, motivations and needs (Barth 1993).). In this categorization patterns evolved around different and often conflicting themes such as "Time", "Comfort", "Community", "Presumed Knowledge", "Environmental Awareness" and "Convenience".

These patterns constitute the dominant tones in the empirical data attractions that we developed from the fieldwork. Thus we created a collection of 'attractions' that would form the basis of the montage workshop. The body of attractions consisted of: 1) various video- and audio clips that were represented as video- and audio cards (Buur & Søndergaard 2000). Each video card referred to a video sequence of approx. 10 minutes of scenario-observations such as "in the kitchen", "laundry" etc. Each audio-card referred to an audio clip from the

[4] More on the selection of data later

interviews and in both cards users described their values, motivations and needs. 2) Cultural probe package in the form of drawings of ground plans, photos and diaries.

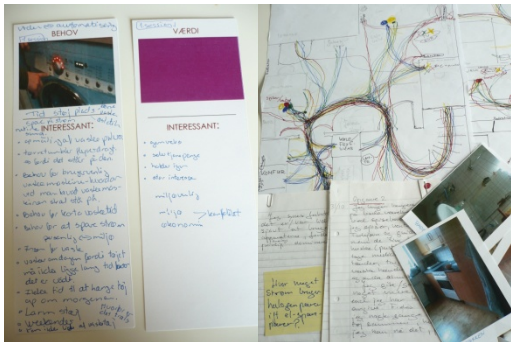

FIGURE 1. Attractions in workshop 1: Video card, audio card and cultural probe material (ground plan, photos and diary)

In the actual workshop we split the partnership into 4 groups of approx. 4 and each group had to pick a video card, an audio card and a cultural probe package. The contents of the cards and cultural probe originates from different users which means that a group might pick a video card showing a family with children making dinner, while the audio card contains statements from a retired couple and the cultural probe features a student and her two room flat. Even though the data is presented in a very fragmented form and with contradictory contents, the different forms of the data (visual, audio and material) makes it easier for the group to couple the fragments in a montage with a somewhat coherent narrative because you only see one family, hear another and experience a third.

The following task for the group was to look/listen through and analyse the material for values, motivations and needs in the broadest sense. They were then to discuss their understanding of the empirical 'attractions' and try to form a coherent narrative of the new 'montage' user.

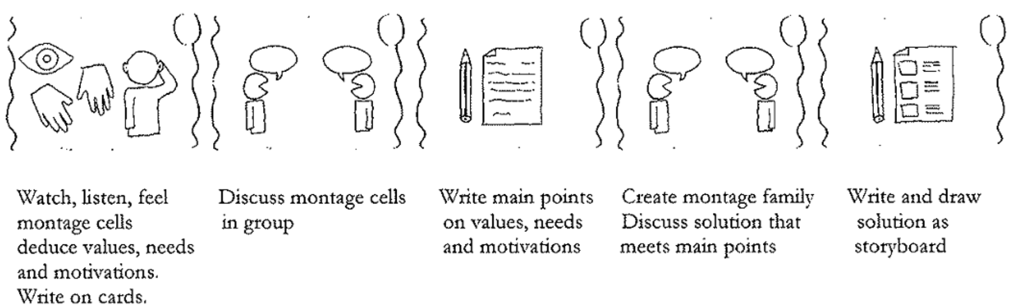

FIGURE 2. Attractions are coupled together through workshop sequences in the first workshop.

At the end of the workshop each group presents their solution:

> "Well, we have picked out the video as our point of departure [attraction A]. It regarded doing laundry and the lady experienced a big need for doing big batches of laundry at a time and she didn't quite know how her machine should be set so she just set it as she always did. She actually found it really annoying to do laundry [...] Furthermore she was very aware of the environment. She knew exactly what kind of detergent she was using, it was environmentally labelled and it wasn't nice to get perfume on the children's skin. So we chose to deal with this aspect of making the laundry process more efficient. We also had another interview [attraction B] in which economy was important so there was a conflict between money and environment. So we would like to make it fun and interesting to do laundry and make it easy in daily life because we also have the time aspect" [...]

The group suggests making a washing machine that visualizes what kind of energy it uses and:

> "[...] how much energy, CO_2 and money they have saved because the other story [attraction B] goes that the man in the house has bought a indoor climate system which is now stuck in the basement because it costs 25 thousand kr. to have it mounted so he hadn't done it even though he really wanted to because he couldn't afford it. But in this way he can save up money for that. We also had ground plan [attraction C] of a flat in which there is hardly no room for this washing machine and where to dry clothes? So we placed the machine in the bathroom and made an integrated drying cabinet in the wardrobe."

W1 – Experiences - ***As can be seen in the above, it didn't prove hard for the partners to couple the different forms of material and they succeeded in creating a montage narrative comprised of the three different types of attractions (video-, audio card and cultural probe) which contained different needs and values such as economic awareness vs. environmental awareness. The groups overcame the challenge of including oppositional values, needs and motivations by creating a 'montage family' in which different members of the family represented different values, needs and motivations. In this way it became clear for all that one value or motivation shouldn't dominate the generated solution and thereby the first step in de-constructing the 'rational economic user' was taken. In the solution the rational economic motivation was part in line with motivations such as "fun", "time pressure" "environmental awareness" etc.***

Even though the different data-forms made it easier to couple fragments into a montage with a more or less coherent narrative, the different data-forms also turned out to be quite controlling of the solution generating process. The video material ended up being weighed higher than the other data-forms and several solutions first answered to the demands in the video and afterwards to the audio and probe material. The reason for this might be that the video-material was the longest (10 min) while the audio-material varied from 1-5 min, which meant that the video material provided the groups with the most information to relate to. The video material also provided the groups with both visual and audio in its form which probably made a better lasting impression on them. At the same time our experience was that if the audio-material and cultural probe material was more contextualized it would enter into the user narrative with as much weight as the video material. The main challenge here is to provide enough context to the presented data to create a resonance between participants and presented user material, but on the other hand not to present three full fledged users which cannot be rearranged and recreated into one montage user or montage family with many different needs and motivations.

Workshop 2

In the second workshop we wanted to take a step further and try experimenting with actual users as attractions. This workshop was a mock-up workshop and both technical partners and three users participated. Its purpose was to create mock-ups of the control system which afterwards would be tried out in the homes of other users.

The workshop comprised of three rounds: 1) storytelling 2) creation of future scenarios 3) mock-up creation. After each round the users rotated and in each round the technical partners had to deduce motivations and needs from the (new) user and work them into the task of the specific round. The most thorough user input is provided in the first round of storytelling, in which the user tells about their life based on 4 photographs which they had brought with them. In the 2. and 3. round the new users provide the group with inputs on their specific values and motivations combined with their experiences from their lives.

FIGURE 3. Users as attractions rotate between the three technical partner groups thus the groups are involved with all three users.

Thus we tried to create new 'montage users' as in workshop 1 only this time by letting the actual users circulate as attractions between the groups during the workshop, while each group continually worked on one montage family narrative.

One of the findings in the initial user involvement was that users were very much motivated by "fun", "competition" and "community" and spurred on by Karin, a present user in the mock-up workshop [attraction A], one of the groups came up with an idea for a system which facilitated a comparison and visualization of different users' energy consumption. But even though Karin felt that this feature would be a great motivation for her, in the next round of the workshop another present user Karl [attraction B] put his foot down in regards to this and in the end the group came up with a montage solution which could include both Karin and Karl's somewhat conflicting needs and motivations. The groups thus presented their montage solution in the following:

> "If we start with this more community minded thing: Here we have a collection of mailboxes in the communal staircase of an apartment complex. It has all the names of the inhabitants and a single display which pops up the minute you open your mailbox with a visualization of your energy consumption which is rated against your neighbours. […] The target is of course that you continuously benchmark yourself [your energy consumption] in relation to the others in comparable housing. Then there were some issues which Karl made us very aware of. Originally we wanted it [a screen with info on energy consumption] to be flickering on all of the mailboxes all the time [a scenario which would motivate Karin] but then Karl said: 'There is no way people will accept that!' And I agree on that somehow. First of all it has to be voluntary if you want to see that pop-up screen. And it has to be anonymous. You shouldn't be able to see which of the neighbours are consuming. On the contrary it doesn't need to be voluntary to have your data collected in the local community because that would be alright"

W2 - Experiences

As we see in the above the technical partners are again challenged in their perception of users and "forced" to create solutions that meet the various and conflicting needs and motivations of the different users that take part in the workshop as attractions. This means that the present users are coupled with all of the other users present and this new coupling of sometimes opposing fragments opens room for reflection in both user, technical partner and anthropologist.

The partners seek the coherent narrative and are challenged in trying to combine opposing needs in the mock-ups. It seems that it is more challenging to create a working montage of users that are present. Following user-rotations the partners feel inhibited because they are now dealing with a new user, which they feel cannot provide them with answers on some of their concrete questions to the preferences and needs of the earlier user. On the other hand they find it very interesting to meet different users and not only being limited to one. The participants wanted one user to be the dominant and the other users to be inspirators. This resulted in the result of the workshop being a 'montage mock-up' that met different user needs, which had been the intended purpose, instead of a montage family which was the intended result of workshop 1.

NEW ROLES – NEW INSIGHTS?

The montage workshops offer new roles for both anthropologists, technical partners and users. The anthropologist has gone from mere data collector and user reporter to facilitator and designer of a process which supports a realization process that share trades with the realization process the anthropologist goes through in the field. This role as facilitator as opposed to "user reporter" should not conceal the power that lies in framing the user insights which the technical partners construct in the montage workshop: It is the anthropologist who has generated the data in the first place and also pre-analyzed and selected out the attractions to be used in the workshop. This preparatory process most certainly sets the scene and frames the knowledge creation process but one may argue that the anthropological outset with its eye for praxis and complexity is needed to provide the technical partners with alternative views and can have a *verfremdung*-effect (Dalsgaard 2008) which challenges what is normally taken for granted about users in a field such as the technical one. At the same time the anthropological constructed "truth" about users as complex is challenged by the technicians, and in general the montage workshop can be seen as a lens which gives new access to the data from new angles and thereby provides the anthropologist with new insights on both users and technical partners.

Technical partners are performing the active role of knowledge creators instead of knowledge receivers. This knowledge creation is part of the realization process in which the users are constructed as complex and nuanced. The active participation of technical partners in co-analysis of material is not new (see e.g. Halse 2008), but the montage method takes a step further than "just" engaging the partners in co-analysis; in the montage workshop the partners are engaged in a realization process based on montage theory which frames the whole initial user involvement process.

The users are drawn into the project as attractions instead of fully explicated human beings. This fragmentation is somewhat of a paradox: We consciously fragment the users into simple attractions because we want to design a process which brings out the complexity of the ethnographic material in a comprehendible and irreversible manner, seeing that it is the partners themselves who are interpreting data and creating a montage and thereby constructing the users as complex. As considered above we argue that this is actually achievable when representing ethnographic data in montage workshops.

At the same time the fragmentation of users poses an ethical question in relation to how we treat and represent ethnographic informants and data. The usual critiques that have been levelled against radical constructivist cinema (see e.g. Suhr 2008) may also be levelled against our data treatment and representation in the montage workshop method which could be said to dissolve the individual to the benefit of the whole and reduce to exemplars of particular practices, values, motivations or needs so that we never really get to know the users as whole persons. However these critiques are more appropriate levelled against the montage cinema than against our workshops: Our reason for representing our data in the form of a workshop and not a film, was partly because this form could contain many different types of data; amongst others the cultural probes material that had a more intimate and "feely" character which provided the needs and values with a "flesh and blood" context and in the second workshop users were actually present. This ensured that the partners were reminded that they were developing a system for real human beings and not just social types or artificially constructed exemplars of values and needs. In this way we do actually get to know the users as human beings who are so much more than just motivations, needs and values – a narrow view of humans which would result in the opposite of our intentions of facilitating a construction of users as complex, whole human beings.

Another big difference between montage workshops and montage films is that we cannot in the same way control the coupling of fragments in the montage workshop because the groups arbitrarily choose the user inputs (video-, audio cards and cultural probes) in the first workshop. In the mock-up workshop the interaction between users and technical partners is framed and controlled by the specific task that they must go through, but whatever else goes on between user and technical partners is not controlled. This means that the created montages are arbitrary which fully supports the principle of montage theory but at the same time the degree of conflict and variations within the montages is varying which means that some partners may not in the same degree be challenged in their preconceptions of the users.

Yet a thing to consider is that the partners are only exposed to a limited part of the ethnographic data in the workshop. We have tried to overcome this problem by summing up all of the results from the workshops and coupling them with points from the anthropological analysis which may not have been obvious in the montage workshops. When these documents are read by people who have been engaged in the realization process, the "thin description" of user needs and motivations is given much depth because the readers is drawing on embodied experience from the montage workshops.

The above circumstances make it obvious that the montage workshop is not a stand-alone method in a UDI process. Successful in providing the technical partners with a realization of users as complex, the method is useful and, we would argue, necessary in the initial stages of a project in which technical partners (especially if new to user involvement) creates their initial knowledge of the life worlds of the users. The montage workshops hereafter provide the technical partners with a shared embodied realization of the users which they can draw on and relate to through the remaining project period. At the same time or later on in the UDI process it makes sense to engage supplementing methods of representing the users, such as textual elaborated user portraits which at this point will be more accessible for the technical partners who have gone through the realization process in the montage workshop. These supplements can ensure the more broad and elaborated user contexts which are intentionally not part of the montage workshops because we choose to unfold many different user needs and motivations instead of focusing on few elaborated users, which has the risk of categorizing users into somewhat one sided stereotypes such as 'the environmentalist' or 'the economically aware' and so on.

More generally we see the montage workshop as a way to further democratise the UDI process and that has two related implications: first of all, more "power" is given to the technical partners because they are engaged in the creation of knowledge and as a result of this the technical partners are left with tools to keep working with the users even when the anthropologist is not there to facilitate the process. This means that the method is somewhat scalable and the theoretical montage framework can be used in other contexts and scales by anthropologists or the technical partners themselves.

CONCLUSION

In this paper we have argued that in order to make sure that user complexity is fully realized and "owned" by technical partners and further implemented in the technical development process we need to design a realization process for these partners that shares traits with the realization process that the anthropologist goes through in the field.

We show that this realization process is achievable if we design a process based on the principles of montage theory within filmmaking and refit these theoretical principles to a workshop form which is able to contain and fully utilize the many types and forms of data, each giving new perspectives and insights on user life worlds. The workshop is able to engage the technical partners (and users) actively in co-creation of knowledge and solutions. In this process we challenge the roles of both anthropologist, technical partners and users. Especially the role played by the user and our way of representing the user as attractions is new to anthropology and the field of user involvement. With this method of representation we have taken the representation debate within anthropology (see e.g. Marcus & Fisher 1999) seriously and we believe that the montage workshops are relevant and useful alternatives to time demanding thick descriptions like written user reports or thin descriptions such as stereotyped personas.

What is obvious however is that the montage workshop is *not* new in utilizing co-analysis, co-creation of knowledge and mock-up workshops as such. The montage workshop method is a method to frame the use of these kinds of workshops and conceptualize the social processes that constitute every UDI process. Our expectation is that the montage workshop will inspire and provide new perspectives on how to frame a UDI process based on the useful principles from montage theory and hereby exploit the full potentials of user representations if we challenge the roles played by anthropologists, technical partners and users in these representations.

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Numbers Have Qualities Too: Experiences with Ethno-Mining

TYE RATTENBURY
Intel Labs – People and Practices Research

KEN ANDERSON
Intel Labs – People and Practices Research

DAWN NAFUS
Intel Labs– People and Practices Research

RYAN AIPPERSPACH
GoodGuide.Com

Field research holds a special place for those who conduct it. It is also our anchor for relevance in the corporation. This paper explores the authors' experiences with "ethno-mining", a way of joining data base mining and ethnography. Since 2004 we have been using a variety of sensing and behavioral tracking technologies in conducting field research. We will present the main characteristics of doing ethno-mining, compare ethno-mining to other field research technologies, highlight the strengths of ethno-mining in co-creating data with participants and conclude by noting how the representations have opened new conversations and discourses inside the corporation. In this way, these new opportunities to collect sometimes counterintuitive data contributes to the research itself as well as the ongoing process of constructing oneself as relevant.

"Where are the visualization tools that allow the contradictory and controversial nature of matters of concern to be represented? … What is needed … are tools that capture what have always been the hidden practices of modernist innovations: objects have always been projects; matters of fact have always been matters of concern. … What I am pressing for is a means for drawing things together – gods, non-humans, and mortals included."

Bruno Latour – keynote lecture for the Network of Design meeting of the Design History Society, Falmouth, Cornwall, 3 September 2008.

INTRODUCTION

Ethnography ain't what it used to be. Recently anthropological writing has focused on the changing nature of what is "the field", anthropologists' relationship to participants in research, and bounds to research problems (Amit 2000; Blomberg 2005; Cefkin 2006; Cerwonka and Malkki 2007; Fabian and Marcus 2009; Gupta and Ferguson 1997; Rabinow

2005; Strathern 2004). Primarily the focus has been on theoretical issues raised by doing field research, despite the continued privileging of the firsthand account as a way of marking the field off from others. This paper is not about that. Theory plays a critical role in field research but field research practices have also historically transformed alongside introduction of new technologies, like tape recorders, cameras and video. This is not to argue deterministically that technology has pushed field research to do certain things, but simply that our knowledge, like our informants', shape and are shaped by the material world. We have recently had the opportunity to grapple with a new kind of technology to be used in field research—behavioral tracking technologies. As these become simpler, inexpensive and more ubiquitous, anthropology will need ways of thinking about what these mean not just for societies at large, but for our own discipline, if anything. In this paper we will introduce a notion of "ethno-mining," which was our way of understanding what these technologies might contribute to research, and describe some of the advantages and challenges that come with it in practice.

Ethno-mining is a tool that began life as an experiment within human-computer interaction (HCI) research communities to merge database mining and field research (Aipperspach 2007). We subsequently built on this work to employ it as a means to conduct cultural analysis. It combines the semi-automated collection and analysis of behavioral data with the collection and analysis of qualitative data in an open and iterative analytical framework, relying heavily on shared artifacts, in our case data visualizations, for the co-construction of meaning. The focus on cultural analysis (see Bezaitis 2009) attempts to articulate symbolic meanings, cultural practices and social situations surrounding a particular research topic. We provide this as contrast to other modes of field research within corporate settings that may focus on identifying personal motivations and individual needs. Instead, approach peoples as constituted by systems of interwoven meanings and practices, not as users of products with needs fixed a priori. One could think of this as the difference between *finding* findings and *creating* findings in partnership. In the same vein, we generally follow Marcus's (1995) notions of multi-sited ethnography, where we are focused on research that looks across social geographic and cultural sites, rather than highlighting or exoticing the particularities of one site, location or context.

This is all to say that as we outline our use of ethno-mining, it is important to understand these epistemological assumptions, as they also structure the practical goals of research. Specifically we are arguing that when used in particular ways, data mining techniques, which have largely been developed for market research agendas (and for the purposes of furthering the panopicality it so often pretends), can nevertheless be used in ways that work well with the principles behind multi-sited ethnography, science and technology studies (STS) and other aligned traditions. In this paper we will present two aspects of ethno-mining: a) its use as an in-field tool and the analytic entanglements that it entails, and b) its use as a representational tool and its reception in corporate presentations. In doing so we will highlight the complexities and complicities of using ethno-mining.

Hybridization, Co(a)gents and Ethno-Mining: Or, Ethno-Mining is a Reese's Peanut Butter Cup, Not an Oreo

Many readers might recall those commercials where a kid comes home from school and gets an Oreo and a glass of milk. The first thing the kid does is separate the Oreo in order to eat the center first (or last). Reese Peanut Butter Cup commercials, on the other hand, emphasize chocolate and peanut butter going together to create something delightfully new. No one ever tries to separate the chocolate from the peanut butter because the joy is in the joining "two great tastes" into one. In theoretical circles, this joining is sometimes referred to Michael's (2004) recognizes how field research often has numerous kinds of interactions and relationships that are hybrids. To understand these relationships, he has developed an analytic framework around "co(a)gents". He describes co(a)gents as "heuristic probes with which to examine and explicate relations, connections and interactions that are barely apparent but nevertheless serve in the (de)constructing of everyday routines" (2004:10).

Indeed, at the core, this is what we are attempting to do with ethno-mining. These data serve as co(a)gents to assist the researcher in deconstructing the phenomenon being studied. For example, a researcher might (as we document below) use traces of computer usage to provide a different lens on issues of temporality. In this way, ethno-mining is a hybrid, not a "mixed method"; it is two elements that cannot be separated out. Having said that, traces of each of the ingredients can still be seen - the same ethos of ethnography (open-ended, co-constructed, holistic field research) integrated with the empirical and analytical capacities of quantitative data mining. By integrating both automated data collection and discursive storytelling, ethno-mining does not separate out the quantitative and qualitative data from an ethnographic ethos. Numbers are treated in ways that surface *qualities* in addition to quantities.

WHAT WE DID

In our work, which was an exploration of computer usage and temporality, we employed detailed interaction logging on personal computing devices (laptops, netbooks, ultra-mobile PCs, smart phones). In some studies, we have also asked participants to carry other behavior tracking devices, like cell phones outfitted to collect the participants' physical location at the timescale of seconds. While such data does not provide a comprehensive view of all aspects of contemporary life, it does provide a deeper view into many aspects of contemporary human behavior. To help contextualize this tracking data, we rely on other ethnographic methods to collect data on the behaviors that are not tracked and on perspectives and meanings of the tracked behaviors that are not directly captured in the quantitative data. The various streams of data are integrated using the iterative analysis process described below.

Tracking people's interactions with computing devices is possible through the affordances of the devices: specifically, they are designed for individual usage, they are readily available in many parts of the world, and they are portable. Furthermore, in the places where we have conducted our studies, in the US and parts of Europe, computing devices are common place and widely used; so tracking behavior through their usage was neither conspicuous nor significantly disruptive to the study participants' lives. In terms of the variables we tracked, we collected details on the internal functioning of the devices as well as details on the types of information participants were accessing. This yielded a sense of where machines were being strained, but it also enabled us to create visualizations of the temporality with which devices were used. This enabled us to have discussions with interviewees about the relation between their feelings and experiences of busyness, and the computer. The interviews revealed the subjective conceptions of device use both as an activity in its own right and as a component in wider webs of activities that constituted relevant contexts around the usage (Rattenbury 2008).

As shown in Figures 1 and 2, the visualizations we created were evocative. That is, they were so complex that they required interpretation. The colors and times of day had a pattern that did indeed correspond to the device tracking, but were not directly obvious what color corresponded to what. Interviewees (and us researchers) would physically move back and forth, first close up then further away, find the right perspective to tell a particular story about what was happening. Decisions were being made about what the relevant scale of temporal experience was. Although not by design, it happened that the location tracking component sometimes indicated that a person switched locations when they had not. This served to remove some of the authority that participants tended to grant such 'objective' data, and made it much more comfortable for them to have something to explain. At times identifying what the colors could possibly represent—a 'mistake' or a movement, given their time of day and duration became a puzzle of sorts that generated the sorts of discussions about temporality that one simply cannot have otherwise. What began as a means of getting around impossibility of doing long term participant observation (see below) became its own mode of interpretation. It became no longer the poor man's substitute for not being there, but its own nexus of meaning.

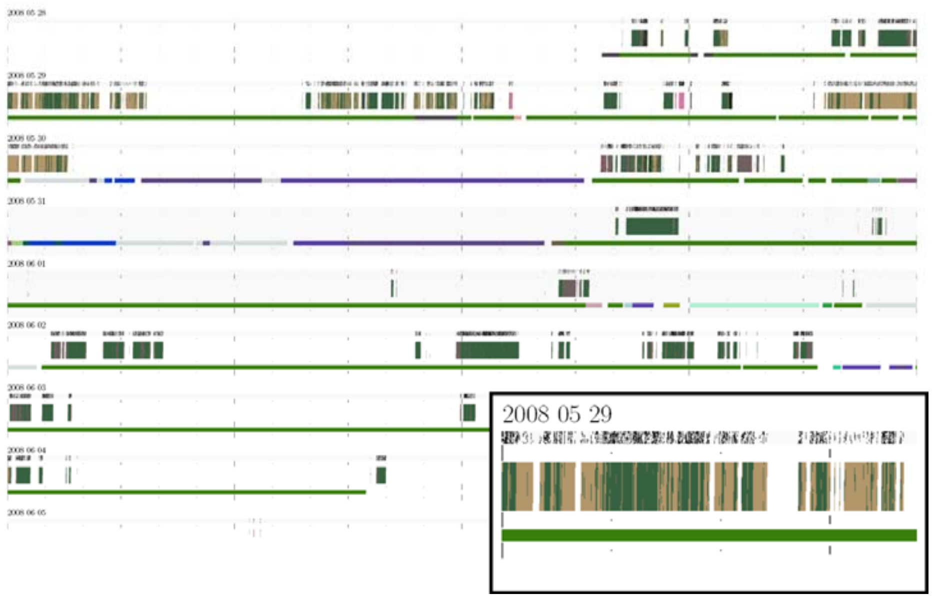

FIGURE 1. This figure displays part of a data visualization used during an ethno-mining contextual interview. The visualization plots computer use and relative user location. Each day of data is plotted horizontally, from midnight to midnight. The zoomed in portion of the figure (bottom-right) plots a little more than 3.5 hours of May 29th, 2008 for a single user. The top portion of each day's plot corresponds to user input (the denser the markings, the more the user was typing on the keyboard or using the mouse). The thick center line for each day plots the focal application (each application is assigned a unique color). The bottom line for each day plots the user's relative location – separate locations are assigned separate colors; however the physical or semantic identity of each location is unknown.

FIGURE 2. This photograph illustrates the collaborative interpretation of a data visualization during an interview. The data visualization in this photograph is the same as in Figure 1.

The formats of these visualizations are created by us, the researchers, and hence contain our perspectives on what might be interesting or meaningful findings. We tried, however, to leave the content in the visualizations in their rawest and most complete state – avoiding even simple transformations like taking averages or only displaying subsets of data. We have found that if these artifacts are to act as mediators, they must in a sense be foreign to both parties. That means that these visualizations are best designed in coordination with certain principles in mind. First, they ought to include as much data as possible, to allow for as much iteration between findings and framings as possible, and to give both the researchers and participants plenty of material to construct narratives in the joint-interpretation process. For example, we included user inputs like key clicks and mouse movements, application use, location, etc., without knowing *apriori* which would be the important indicators of what someone was experiencing temporally. Second, they ought to provide enough interpretive space (or ambiguity) for the researchers and study participants to generate multiple complimentary and competing narratives. Here we kept the labeling of the colors at some physical distance, and exploited the accident of inconsistent location sensing. Finally, and in some tension with the latter, visualizations ought to be visually accessible/legible by both the researchers and the study participants. Complete data occlusion ceases to be evocative. In every interview, we found that brief oral descriptions of how one might read some small portion of it (e.g., the middle of the chart is the middle of the day, the colors correspond to programs you used, etc.) to were sufficient to enable study participants to effectively incorporate our visual language into their thinking. After about five minutes, all our participants established certain fluency and artfulness in reading this data that otherwise is there to make the familiar seem strange.

What started out as obtuse and not intuitive quickly became something intriguingly interpretable, and indeed personal. Participants often asked for copies of them afterwards, as the process of interpreting it gave them a different way of seeing a short interval of their life. In our case, the visualizations allowed us to have a conversation with middle class Americans about time use that helped both them and us get beyond the dominant and highly charged discourses of being busy (Darrah et al. 2007, Shore 2003), while at the same time creating enough space to observe when and how this discourse is made visible and invisible, what activities are consistently enrolled in its frame and which are not. People began to question for what, exactly, one was 'busy' and under what circumstances. It evoked multiple connections to wider contexts, and exposed a number of implicit assumptions about the data and its semantic status in both researcher and participant. This proved to be more informative than trying to observe or interview about such assumptions. The co-construction of meaning enabled traces of computer use to be more than simply a way of capturing patterns of minutia that people might not themselves remember. It created a third space in which interpretive frames might be negotiated and re-negotiated. It surfaced, as Latour has called for, the contradictory and controversial nature of matters of concern (see epigraph).

ETHNO-MINING IN RELATION TO IMAGE CAPTURE TECHNIQUES

Like video, photographs and time diaries, ethno-mining attempts to capture observable behavior in a ways that facilitate analysis. The data that is automatically collected through sensors and other technologies we refer to as *behavior tracking data* (ethno-mining being the iterative research process described above). Behavior tracking data broadly includes any numerical data that registers some consequence of an individual or group of people acting in the world: e.g., their physical movements, their interactions with physical or virtual objects/information, their interactions with other people, their health, etc.. In this sense, we are celebrating Strathern's claim that " social anthropology has one trick up its sleeve: the deliberate attempt to generate more data than the investigator is aware of at the time of collection . . . a participatory exercise which yields material for which analytical protocols are often devised after the fact" (Strathern 2004:5). There is continuity to be found with traditional[1] ethnographic research tools.

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[1] We give a nod to Nina Wakeford (2005) on the words "traditional ethnography" - "The term traditional ethnography makes me shudder, as much as the term family tradition does"

To the extent that ethno-mining produces an excess of data, we find ethno-mining to be analogous to descriptions of using video from the 1990s. Suchman and Trigg (1991) were able to capture interactions and behaviors that would have perhaps been otherwise unnoticed or unseen through video. The sensing and tracking software that we have today can similarly capture data related to the often unseen or unnoticed. For example, in our study we could easily track behavioral events at sub-second timescales, 24 hours per day for multiple weeks or months, or even years, and simultaneously for hundreds of people. In additional to gaining a wider view into human behavior, some of the data can also track the direct impact of these behaviors on physical and virtual environments (e.g., on the physical and virtual computing infrastructure: Ratti 2006). There is more at work than a mere glut of data points. Images can surface that which we do not see for its familiarity, or more embodied less discursive, forms of knowledge. It is only upon reflection that photos or videos take on its new relevance, when combined with other sources of data input. Ethno-mining works in a similar manner, in the sense that what at once is unremarkable becomes a pattern of note when combined with other data sources.

There is a tension, however, just as there has historically been a tension with other technologies in fieldwork. Ethnography in corporate settings is often embraced as a method of observation (Sunderland and Denny 2007). Observation carries with it notions of transparency of meaning and the capturing of facts. Observational data is a key part of what makes research trustworthy in corporate settings. Conceived of in this way, ethnography carries symbolic ties to the natural sciences with the obsession around observing and counting as facts, rather than the interpretations, co-creation and social production of insights. Popular media reflect this the notion, often highlight the behavioral observation aspect of conducting field research, an article that featured Intel in Business Week (2006) started with a with a picture of "ethnographer" in lab coats looking down into a house to observe people. Similarly, in the film Kitchen Stories, which is a dramatization of a relationship between an observer and the observed, the observer, sits in a comically high chair in the corner. The chair symbolizes the distance between observers and observed which over time becomes even more preposterous and breaks down.

In corporate settings, many technologies in field research are used to present work as akin to scientific observation studies of behavior – resulting in the rapid adoption and widespread use of data capture devices in these contexts. Tape recorders, cameras and video tape have all been field research tool additions that have changed how field research is done (a few examples from video: Askew and Wilk 2002; Barbash and Taylor 1997; Ginsburg, Abu-Lughold, and Larkin 2002; Pink 2001; Ruby 1980, 1991) and relationships with participants[2] in research. Indeed, when much of what has been recognized as classic field

[2] We have used the term "participants" to refer to people in our studies since the 1980s. We highlight this use because it notes that these people are participating, co-creating with us our data, findings and insights. By focusing on participation, it has us thinking carefully about methods we use and how we use them. We contrast this to other common terms like: informant, respondent, subject, which all signify a different relationship in field research.

research was conducted in anthropology, these technologies were rare if used at all. Today, photography and video hold a central position in field research, particularly with the research being done for corporations as for managers they signify that scientific research is being done. These are the technologies that have been used to capture behavior and also to represent data to corporate audiences. In the last seven years, to our knowledge we have not seen a request for proposals (RFP) go out from companies to consultants for ethnographic work that does not *assume* video recording as part of the research technique and representational deliverable.

We see ethno-mining as being very similar to these technologies, particularly video, in terms of the appeal beyond academia. It also raise similar fieldwork issues around what the data means, relationship to participants and the public reception of how these are represented. Photography and videography can both work to distance the researcher from the participants in the study (Wakeford 2005). The technology itself literally can become the filter through which the researchers and participants interact. This creates a sense of "objective" distance – as something happening over there that "scientists" can observe form over here. The behavior tracking data aspect of ethno-mining can be viewed similarly. Tracking data by itself, not as part of ethno-mining, similarly gives the appearance that researchers are objectively removed from the participants and the research sites. However, it can, as we outlined above, be used as a component for building relationships with participants, ultimately enabling new narratives from them. In our case, this interpretive bent is more than just in how the data is used, and extends to how it is created and given material form. The visual form we give it goes to some lengths to make very clear that tracking data is not 'true' in any straightforward sense, but awaiting social interpretation, (de)construction and debate.

Nevertheless, like previous technologies, behavior tracking has the potential for dual reading – e.g., the researcher might unpack and interpret it for the benefit of a stakeholder, and design a visualization that frustrates attempts at a reductionist reading, and nevertheless it might be (and at times in our experience has been) taken to be "transparent" data collected (Nafus and Anderson 2005). Ethno-mining carries with it the same risk. Just as images of, say, a photo of a child putting up graffiti on a wall in a favella might be made to be 'transparently' about Brazil as a nation of starvation and lack of opportunity, so too ethno-mining can be interpreted as more "real" or truer than other methodologies anthropologists employ. Indeed, as we document below, this slippage affords both a foot in the door in strategy discussions and product planning efforts, and yet immediately becomes a constraint as engineers struggle with the idea that numbers require interpretation beyond back of the napkin common sense-making. This is all to point out that, simply, there is a long history of this sort of problematic, well before ethno-mining techniques became possible. While there are measures that can be taken to encourage a more careful interpretation, – i.e., using it in a soft way to explain what ethnography is to those otherwise inclined – the opposite can (and often does) happen.

Before we discuss the representational politics of ethno-mining, one further comparison with previous technologies is worth noting. What ethno-mining does particularly well is it extends the social, spatial and temporal scope of research. Indeed, we created this technique as a response to the temporal pressures of working in industry that prohibit field research of any length. In cases where it is not feasible to literally spend months on end in the company of a research participant, ethno-mining can provide some set of clues about what may have transpired between visits, or at least a way of talking about it. In this way it has the ability to resurface, though not replicate, some aspects of serendipity that long-term Malinowskian fieldwork was built to capture. But it also reminded us in a new way the constraints and limitations participant observation has always had. For example, in attempting to follow where people used their laptops around the house, we employed location sensing technology on the laptop, rather than video cameras, because we could track the usage of the laptops when they were used in bed—not join people in bed.

We remind readers that behavior tracking cannot be relied upon to be the sole method of field research for the purposes that ethnographers are usually hired. The behaviors which manifest themselves through trackable objects tell a partial story—a very small slice of much larger lives. We do believe, however, that it does powerfully extend our field research tool kit and does not, a priori, lead one down a slippery slope into panopticality and complicity in the growing culture of audit and surveillance.

PRACTICALITIES

We have discussed the relative advantages of using ethno-mining; however, we should also make some note on the pragmatics of using this approach in field research. The primary design trade-off that must be balanced when choosing a device, or devices, to collect behavior tracking data is *minimizing disruption* to the study participants while *maximizing comprehensiveness* of the data. This is particularly acute in cases where the participant is carrying around a device most, or all, of the time (e.g., the data collection device used by Clarkson (2002) is far too conspicuous and invasive for a large sample size study). This entails ensuring that the data collection device is fairly inconspicuous, making sure that the devices have sufficient power (or recharging capabilities) for the duration of the study, the collected data is stored and transferred in a reliable way. For example, our first few attempts struggled with off-the-shelf GPS systems, which required a recharge in the middle of the day and contained only enough data storage for a day's worth of readings. This meant that the burden on participants was not reasonable and that aspect of the research had to be abandoned.

While location sensing at first appears to be the obvious candidate for behavior tracking, it is worth thinking expansively about the kinds of sensing that is possible. For example, clicks on a keyboard got us a sense of temporality that location did not. Care (and a sense of experimentation) needs to be given to thinking through which devices are capable of detecting which aspects of participants' lives, and whether the data collected can reasonably be expected to bear some link to data collected via other ethnographic techniques. For some purposes, the points at which there is a disconnect that might also be useful. For example, our work tracked spikes of CPU utilization, some of which was user-driven and some of which was machine-driven. For those inclined towards actor network theory, these new and odd ways of linking goings on in the non-human world (here, the CPU) and the human world may in fact be particularly evocative.

CORPORATE IMPACT

We used data that looks curiously similar to datamining in order it to create common ground with research participants, who make their own interpretations of its meaning. Common grounds might also be created with others who also have stakes in the research. Corporations all too often struggle to understand the seriousness of qualitative insight. Arguments are all too often made invisible, as if done by voodoo, if they are not told through numbers. In the way that ethno-mining works to de-naturalize the apparently 'empirical' and create a common problem to be interpreted by both research participant and researcher, it has value too for the wider enterprise.

In our own case, we see our own use of quantitative data as engaging with two, fairly distinct subcultures that privilege quantification in their own ways—engineering and econometrics. Companies are engaged in discourses, both internally (operationally) and externally, that center on quantified measurements of their financial viability and success. These measurements are used both retrospectively and prospectively – to assess what happened and what might happen. To engage in operational discussions, researchers at Intel must often translate their opinions, findings, ideas, etc. into numbers: how many people did you interview, how many of them displayed a particular behavior, and how many of them can we rely on to conduct this behavior in the future, etc.. The engineering parts of our company work in astounding levels of quantitative precision. This precision is required to build micro-processors, the components of which might as well be considered nanotechnology. Consequently, to engage in a discussion with engineering groups of our company, we have to translate the description of our findings into precise quantitative terms. This translation does not need to be complete – i.e., we do not have to generate reports that are entirely composed of precise, nanosecond-by-nanosecond measurements. However, we need to identify crucial intersections between our findings and the concerns of the engineers in our company, and then find ways to quantify aspects of our findings in these intersections. By expanding the sample size and directly measuring some aspects of behavior, researchers can in fact perform this kind of expected quantification. But perhaps more importantly, it can render the wider ethnographic thinking more palatable overall. For example, from our study of time use and technology in middle class America, we have indeed spread within our own company something of an understanding of the lived and perceived temporality of computer use and daily life. The appearance of numeric data gets us "in the door", but the insights from ethno-mining provides us with a continuous place "at the table". For example, our understanding of the temporality of daily American life touches on many topics that extend well beyond computing devices and their use. That said, this temporality does provide explicit implications for technology design like managing system responsiveness and power management at the time-scale of seconds and minutes instead of tens of minutes or hours (Rattenbury 2008). These engineers don't necessarily why people do things in this way, though other parts of the company does.

This does not mean that the qualities go out the window in the interest of corporate expediency. Earlier we emphasized the quality, not quantities of numbers and the co-creation of research insights with participants. Just as we have worked to create new kinds of representations of data to use with participants in our field research, so too we've labored on new ways to present ethno-mining materials internally to the corporation. Ethno-mining, by having the appearance of capturing "real" data also affords the opportunity to share its messiness, allowing for a co-creation of interpretation in corporate meetings as well as in field research. Figure 3 is a chart of time of day of computer from a study we did on notebooks. The x-axis represents the hours of the day, from midnight to midnight. Each line on the y-axis represents a participant in the study. The more yellow spots on the y-axis line are, the more the computer was used during that time segment over the ~8 weeks of the study.

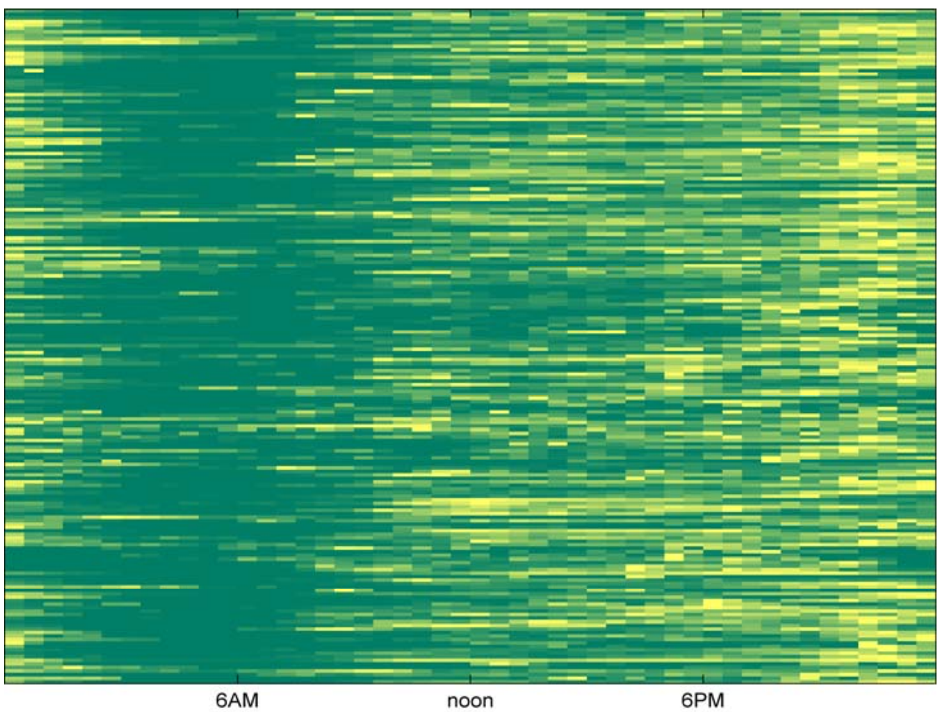

FIGURE 3. This data visualization was used during presentations to senior management, new product planners and platform engineers. The figure illustrates how we have attempted to demonstrate heterogeneity of the data and call into question the transparent reading of "facts" of quantitative data. Each line of the y-axis is a participant in our study. The x-axis is time, from midnight until midnight.

If we were just taking a quantitative approach we could present a "fact" that 40% of usage happens from 6-midnight, 10% from midnight to 6AM, 20% from 6AM until noon and 30% from noon until 6PM. Indeed such facts were asked for and we resisted providing them. Instead, we held a discussion about what was and was not predictable about computer use in conditions of such temporal heterogeneity. When presenting this material, colleagues in the meeting are not always sure what to make of the data. Indeed, this is one of our goals in presentation, to open interpretation by calling into question "the known" and what are "facts". The representations allow us and colleagues in a meeting to challenge the objectivity, reliability and neutrality of "facts," ironically by being even more fact-like. This becomes an occasion to highlight why this temporal heterogeneity matters so much culturally, where the precise schedule and management of time has become the dominant way of understanding temporal experience. Here, we are able to use the data combined with our cultural analysis to highlight the heterogeneity of participants, to bring to the fore ground the multi-dimensionality of the lived experience by multiple people in multiple places. Engineers and managers could come to see this more readily through the lens of something they felt far more intimate with –the machine.

Since representations of participant behavior have relatively high power within our corporation, we are presenting another example from one of our presentations. In this case, in Figure 4, the x-axis corresponds to participants in the study, while the y-axis is the percent of the incidents of sessions and the colors represent different durations of sessions.

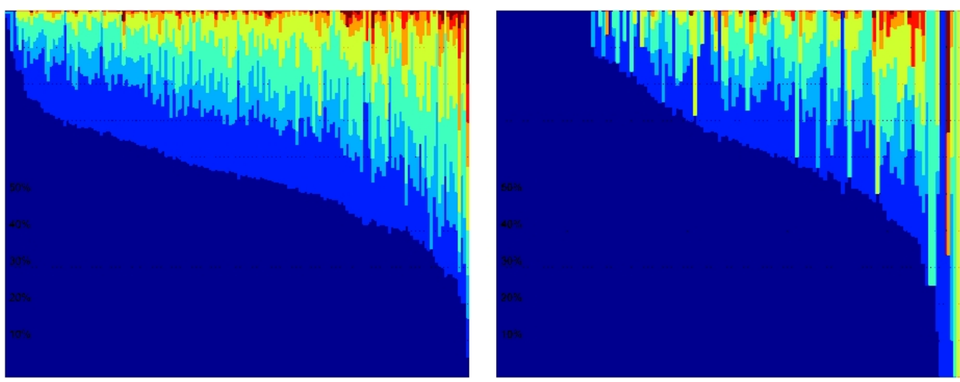

FIGURE 4. This data visualization was used during presentations to senior management, new product planners and platform engineers. Each vertical set of stack bars corresponds to a separate study participant. The colors represent different events, in this case durations of computer usage) and the heights of the bars give a relative probability of occurrence for each of these events, for each participant.

The data could be presented as a table, for example:

	notebooks	UMPCs
50% of sessions are shorter than	3.5 mins	2.7 mins
70% of sessions are shorter than	8.7 mins	6.7 mins
90% of sessions are shorter than	25.8 mins	18.4 mins

Presented as such, the facts leave little room to include a discourse on the social nature of temporality–why, for example, the longer session remains a significant part of usage even for those who skew most radically to the brief interaction. Instead, presenting the behavior tracking data visually in a more complete way affords an opportunity to highlight the importance of our cultural analysis while grounding the conversation in a concrete shared object of charts from the ethno-mining data.

Visualizations such as these allow us to recast a single, coherent set of findings differently relative to different audiences. In the two cases above, we could use one narrative line with engineers, needing to focus on engineering decisions for computer platforms in 2013, while using the same charts and data, we were able to carry on a completely different narratives around what people's "needs" will look like in 2015. Ultimately, ethno-mining produces rich findings – where "rich" here means multi-faceted, interwoven (with multiple narratives), multiply connected to wider contexts. This richness is achieved by collecting multiple types of data, working inventively and collaboratively with study participants to interpret this data, and working iteratively to identify a multiple of connections between findings and contexts – i.e., to treat the phenomena of study as matters of concern instead of matters of fact.

CONCLUSION

We have presented an overview of our use of ethno-mining, a method that combines the ethos of ethnography with database mining techniques around behavioral data. We have argued that technological advancements in hardware and software provide an opportunity to make ethno-mining as core to the field research tool kit as video and photographs are today. As with all technologies and techniques in field research, ethno-mining comes with some risks, as well as rewards. On the rewards side, we particularly found behavioral data representations with participants in the field were an effective tool in the co-creation of research data. Whether one adopts something like ethno-mining or not, it does call into question what we, as a field, are doing around new field research techniques. Predominately, the innovative techniques that have emerged in practice in recent years have come through design research practices, not anthropology. For example, design researchers have created games like "Digital Street Games" (Chang 2004) as a method to learn more about notions of public and private. In that project, researchers asked participants to document their lives, from a sensor's point of view. While creative, imaginative and insightful as these techniques have been, ethno-mining has enabled us to be perceived as having impact and staying relevant during these economic down times through its perceived seriousness. Indeed, our use of ethno-mining has been so taken up in the company, that requests for us doing it have matched the kinds of requests we had four or five years ago for doing video with field research. We only hope that careful use and reflexive practice of doing ethno-mining continues to work against the strong corporate impetus to simply create more data.

NOTES

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SESSION 3 – NEW NICHES FOR OLD: ADDING VALUE IN AN ECONOMIC DOWNTURN
PAUL DURRENBERGER (PENN STATE UNIV, USA), CURATOR

Challenges and opportunities for ethnographic market research in uncertain times

JEAN ZELT
Technology Sector, Product Development & Innovation, TNS Custom Research, North America

While we believe in-depth, observational approaches are still the most powerful way of developing an understanding of users, we must adapt our approach to fit within current economic constraints. One way is to employ economical phases of research that support and strengthen data gathered from in-person, in-context engagements. Specifically, these are preliminary landscape and trends analysis, which provides focused paths of inquiry, and online engagement, which allows us to interact with people over a longer period of time and identify stronger participants for in-person research. The second is to demonstrate to clients how our approaches are broadly applicable and scalable – in terms of activities, participant numbers, and length of engagement – to meet today's immediate goals. Instead of seeing merely compromise, we see opportunity. The adaptations brought on by our new reality are helping us to develop new ways to bring value to clients and challenging us to be creative in ways that will continue to be relevant even after the economy rebounds.

INTRODUCTION

In the fast-changing technology sector, the need for constant innovation seems self-evident as users are becoming increasingly sophisticated and their demands and expectations for a better experience are beginning to outstrip technological developments. However, at just the time when innovation activities are needed most to attract customers, sales are struggling and budgets are being cut. Scaling back is a natural response to an economic downturn, but technology companies might be missing big opportunities, as pointed out in December 2008 *McKinsey Quarterly*:

> "Although delay is the natural response to uncertainty, some companies should continue innovating even in an extraordinarily deep economic downturn—especially with technologies that take a long time to commercialize after discovery. Companies that delay these investments

> may forego significant growth opportunities when uncertainty subsides and the economy recovers." [Nicholas 2008]

Not all companies, however, have the vision or resources to pursue large-scale innovation projects. These clients may have different immediate needs that can still be served by user research. Clients and potential clients are approaching us with some different questions today. Many of them are less concerned about large-scale innovation and more concerned with understanding how to do business with their current offerings, especially when their products have remained relatively the same while consumers' motivations and priorities have shifted. Even if this is temporary, it is a real issue. We continue to encourage research for innovation, but we need to also consider these more immediate needs, which have a higher likelihood of delivering return on investment in the short term. We must develop programs that meet client needs within these new constraints, provide answers for survival in these times, and position clients to thrive when the economy rebounds.

Consumer Factors in the Technology Sector

User-centered product development in the technology industry has required an approach slightly different from that of many consumer goods. Often an innovation project is undertaken as a product or service strategy shaped by technological advancements. User-centered design's main mission is then to optimize the user experience of this effort. Our goal in front-end research is to uncover areas of real opportunity based on understanding of users' behaviors, needs, and motivations, and to help our clients match them with appropriate technology and determine where to focus further technology development.

Well-designed research is critical for addressing the challenges related to technology products, which have a high cost of development and exist in a space where user expectations are rapidly changing and becoming more demanding. Several trends that have emerged in recent years influence this need for consumer-driven product development (TNS Tech PDI 2008):

- The relationships users build with their products, particularly mobile devices, which stay with their owners nearly every second of the day;
- The increasing need to design products around the content they support and the complex relationships between the different systems components (device, content, service provider) caused by this phenomenon;
- The importance of anticipating and designing for the holistic user experience, including many elements device manufacturers cannot control but seek to understand, such as the widely varying contexts of mobile product use; and
- The need to be responsive to changing consumer needs and tastes due to quick replacement cycles.

The complexities described by these trends present strong argument in favor of in-depth engagement with consumers to learn firsthand how they relate to technology products in their daily lives and where gaps exist that lead to new opportunities for our clients.

Methods

At TNS, we are fortunate to have access to expertise in an extensive array of qualitative and quantitative methods. For the purpose of this discussion, we will focus on the tools we have been using in the Technology Product Development and Innovation space that are geared toward addressing our clients' needs at the front end of innovation.

In our approach to front-end user research, we employ a three-phase process (likely quite familiar to anyone working in the same space), based on ethnographic research (in the market research sense of the word, an adaptation of the cultural anthropological practice) and defined here as immersion into the users' behaviors, motivations, and context, to understand the ways in which consumers interact with products and to identify areas of opportunity to address unmet needs and desires. These three phases are landscape analysis, immersive research, and ideation. Here we focus on the first two and some of the ways in which we have been seeking to stretch research budgets, ensure we identify the right participants, and maximize the value of time spent with participants. We will draw on several examples from recent internal and client-sponsored projects, focused on consumer (rather than business-to-business) mobile technology projects.

Project Examples

The example we will draw on most here is a recent client project design that included landscape analysis, online ethnography as an extended homework assignment, and finally, in-person sessions structured around observation and interviewing across several contexts within participants' mobile experience. We will focus here on the first two parts as most of our audience is familiar with observational engagements.

This study involved 16 participants across 4 loosely constructed user profiles in 4 US metropolitan areas. As the mobile experience is such a broad area of inquiry, we needed to develop a focus and understood that, given the time constraints for data collection, travel budget, and professional budget, we could only spend about 3 hours with each participant.

Landscape analysis leveraging client knowledge, internal and syndicated reports, as well as blog harvesting and impromptu contextual observation, helped us narrow our topics of inquiry, while our online ethnography platform provided a cost-effective and efficient way to gain a wider view into participants' mobile lives. These preliminary research activities augmented our in-person data collection, providing insight into the context of the current US mobile device market.

LANDSCAPE ANALYSIS

Landscape analysis involves several activities that help us develop a focused path of inquiry. We build a foundation of understanding about the context into which new products, services, and solutions will be launched. The goal is to mine an existing wealth of information in order to assemble a body of relevant knowledge; form hypotheses about consumer behaviors and preferences, product use, and new opportunities; and focus our lines of questioning. As research budgets are limited and time is often constrained by development cycles, we often cannot afford to engage consumers with an open agenda. Landscape analysis helps us focus on subjects most meaningful to our clients. Trends analysis helps us understand relevant societal, consumption, lifestyle, and design trends. Online data harvesting allows us to “listen” to consumers voicing their opinions in online forums. Contextual observation allows us to experience environments and witness real consumer behaviors. Through these methods, we begin to develop an understanding of the context and focus our exploration on the most strategically relevant and opportunity-rich topics.

Trends Analysis

Trends reflect and affect the way people think, how they behave, what they buy, what they expect. Bernard Brenner of TNS Custom Research equates trends research with checking the weather at your destination before embarking on a trip. Trends analysis involves secondary research that leverages data from our clients, external syndicated reports, and trends data gathered by TNS. When planning new products and services, we must consider what the landscape will be when the product is launched, which in the technology space may be 6 to 60 months from the outset of a project. Trend analysis allows the innovator to “begin with the end in mind” (TNS Tech PDI 2009).

Research for innovation focuses on the following types of trends because their durations are short enough to be perceptible but long enough to have an impact:

- Societal trends address broad forces on society such as economics, culture, technological developments, conscience;
- Consumption trends address patterns of product selection, use, and disposal;
- Lifestyle trends address how societal trends are reflected in the way people live their lives; and
- Design & form trends influence (and reflect) consumer’s aesthetic tastes and expectations more broadly than simply color and materials.

To identify trends, we “listen” to what people are saying, particularly in online forums; leverage industry expertise through syndicated reports; and examine what key influencers and industries are doing (for example, for design trends we might look toward the fashion, auto, and technology industries).

In a 2008 internal study on mobile technology, we examined manifestations of a trend JWT dubbed in 2007 "the New Antisocial," which addresses the way technology is separating people from one another (TNS Tech PDI 2009; JWT 2007). Building on this knowledge and the more recent rise of collective consciousness (JWT 2008:20) and importance of social networking, we sought to understand from participants the interplay of these personal and social phenomena. By acknowledging that they may be cutting themselves off from others in real social situations, participants indicated they were becoming very conscious of these behaviors and setting boundaries to prevent themselves from becoming "that kind of person." We also observed people engaging in localization of their social networks, leveraging them for connection and meaningful action in a tighter geographic area (TNS Tech PDI 2009). Trends exploration allows us to identify areas we want to explore further, and observational research then allows us to identify manifestations of these trends.

An important thing to keep in mind about trends is that different trends have different effects on specific products and categories. Trends also manifest differently around the world; we must take ingrained cultural factors into consideration. Finally, trends are not iron-clad predictions, but rather a guide to understanding what has a good chance of exerting significant influence on consumers' expectations, choices, behaviors, and perceptions.

Online Data Harvesting

Online media provide a wealth of information that can be analyzed both qualitatively and quantitatively. Technology has provided us with a wealth of information that can be leveraged rather economically. Consumers are very vocal and willing to publicly share their experiences with and expectations for products. Social media let us look into the minds of engaged and influential users, yielding insights about aspects of brands, products, or services that are critical for success. Users consume and contribute to online social media to learn about and provide feedback on products and experiences, maintain personal connections, and share experiences. The interplay of social and traditional media shows how the "official" message communicated about and by products is received and interpreted. Social media also provide context to existing findings and can begin to explain motivations behind observed behaviors.

At TNS, the harvesting of online data is completed in two phases. In the first phase, a more qualitative approach, we examine our network to determine the major points of interest around a key topic. Using a variety of public sites and blogs, we compile a list of potential insights as well as areas needing further exploration. This information is used to describe the market ecosystem and help shape the approach for in-context research. The second phase includes quantitative validation of the insights gathered in the qualitative phase. This helps to confirm the weight of the findings: first-tier insights are highly relevant and visible in today's market, second-tier insights are on the horizon, and third-tier insights indicate "weak signals," which may become key differentiators. A variety of companies can perform this analysis, including our sister company, TNS Cymfony.

Contextual Observation

Contextual observation allows us to examine various environments and behaviors to provide a baseline understanding of what we might experience when we engage with individuals. This helps us tune into what we might see and prepares us for the types of questions we will want to ask. It is relatively low cost and oftentimes can be done in parallel with our daily lives. For example, in our mobile technology studies, we kept a log of interesting mobile behaviors and the contexts we visited, which helped us plan our discussion and observation guide and also to develop requirements, suggestions, and possibilities for the mobile part of our engagement with participants. For example, we observed people desperately checking email on a precariously balanced laptop at airport baggage claims, searching for power outlets and table space in coffee shops so they could settle in to work or surf the Web, and pursuing a variety of entertainment and productivity tasks on commuter trains.

One Part in a Process

Though landscape analysis is a powerful part of our process, largely because it helps us develop hypotheses and make sure we are asking the right questions of the right people – either directly or implicitly – and trends reports are useful to our clients, we firmly believe these methods should not stand in isolation. Combined with in-depth engagement with real consumers, landscape analysis increases the power of our findings, providing a basis for understanding our observations.

Conducting some initial analysis of the landscape and including it in proposals has also helped us secure projects. Demonstrating domain knowledge and providing useful, well-articulated tidbits of information, especially through examples of our internal research, helps to capture the interest of clients and establish commitment and credibility.

CONSUMER ENGAGEMENT

We cannot stress enough that consumer engagement is critical for a successful front-end research program. However, we also understand that this is one of, if not the, most expensive types of research and in today's economy can be particularly intimidating, even to clients who have experienced its value before. Our approach strives to provide a scalable offering focused on gathering insights from the most relevant and responsive participants in two phases: online and in-person engagement.

Selecting Participants

Once we have identified key paths of inquiry, we must ensure that we engage the right type of consumers. While much of market research strives for representative "everyman" sample, we take the view that knowledge about all consumers is not equally useful, and for projects where innovation – especially in technology – is concerned, we need creative, outgoing participants who are highly involved in the category we are studying. Our screening process, combined with the TNS Future View tool – a battery of questions designed to identify the most-involved 10% of consumers in a product category – allows us to select the most forward-thinking lead consumers, those who exhibit characteristics of early adopters, connectors, and new consumers (Rogers 2003; Gladwell 2000; Lewis and Bridger 2001). Creative, involved consumers can provide rich information and clues into innovative behavior and show us where the future is headed. By learning from these people, we are able to better match technological capabilities with evolving consumer needs and desires. By understanding lead consumers, we can be better prepared for the later-blooming majority.

Online Ethnography

Online "ethnography" has been the subject of growing interest in the market research community for some time, and TNS offers its own proprietary Deep Dive system, which provides a cost-effective web-based interface through which participants can respond to survey questions, complete photo journals, and communicate with our research team. Without engaging in the academic debate about its legitimacy as an ethnographic approach, we have learned from experience that Deep Dive, in conjunction with in-person engagement, provides a richer view into participant context and behaviors by allowing us access to details we may not have been able to observe during our limited time face-to-face with participants.

In the recent mobile experience project, participants used their digital cameras to show us far more about the context of their mobile situation than we could have seen in the 3 hours we spent with them. For example, we were able to watch their attempts at productivity in an airport, be there when their mobile phone alarms woke them up in the morning, and see how technology supported them as they moved through their day. They also connected these experiences for us by creating mobile maps of their daily paths and highlighted the importance of mobile technology for each situation.

The online component was an invaluable way for us to become acquainted with participants, engage them in dialogue prior to in-person meeting, help them feel comfortable with us, and get them thinking about the study topic by examining their own behaviors. It enabled far greater two-way exchange than traditional paper-based homework assignments. Participant feedback also indicated that they found this to be an enjoyable activity, and no participants dropped out of the study due to the homework burden.

From a practical and economic standpoint, the online tool allowed us to easily and efficiently collate data and generate reports, and it allowed the clients to be involved because they were able to log on to the site and observe participant activity while the study was running.

Online engagements can be used to screen for particularly good participants and eliminate poor ones. In another upcoming study, we will be using homework to engage with a large number of people, and from this group, we will select a subset for in-person observations. This serves largely as a means of cost control; we need numbers from some aspects of the study and in-depth information from others, so the online portion will help us screen for the best participants to meet in person.

Finally, when resources are limited, this type of study can be designed as a standalone project, which allows us to engage with a large number of people, regardless of geographical location and without incurring travel expenses. This type of study can be used as an "update" or "check in" with consumer groups who have already been studied in-depth, providing some insight into how behaviors and values might have changed recently, for example. However, because the data collected are mediated by the participants and their abilities to capture and convey information, we find it to be most powerful in conjunction with in-person engagement, as it allows us to gather both broader and deeper information from the same group of participants. It was also helpful not only in preparation for in-person engagements, but also in retrospect as we could look back and understand more of the context from which that information was provided.

In-person Observation and Interviews

By the time we begin our in-person engagement with participants, we have strong, general contextual knowledge, focused hypotheses, and the beginning of good rapport with our participants, which enable us to make the most of our time in the field. For the mobile experience study, we observed and interviewed people while they were on-the-go, examining the meaning and experience of mobility and mobile technology in one space (such as the home, office, coffee shop, etc.), then observing the transition between spaces, and finally examining the mobile experience in a second space.

The design of this research was intended to cover as many contexts as possible, given our time constraints, and provide depth to our understanding of consumer behaviors, motivations, and needs. It allows us to explore further what participants had shown us through the online studies, confirming, questioning, and connecting the different aspects of what we learned.

Unlike the other phases, the combination of observation and interviewing can stand alone in a study, or it can be added, even at a small scale, to a quantitative study to provide additional depth and explanation to the meaning behind the numbers. Even in difficult economic situations, these studies hold value in helping clients to understand how they might adjust their messages or offerings to help consumers see the relevance of their products despite changing attitudes and priorities. For example, examining consumer behavior in retail spaces can provide insight into how the experience may be improved to alleviate reservations about spending money and encourage people to purchase products, currently a top-of-mind question for many of our clients.

CONCLUSION

Though what we have described here is currently being positioned as a flexible, scalable, and economical approach to maximizing the benefit of in-depth consumer engagement under constrained budgets, we truly believe that comprehensive studies like this will continue to be relevant and more robust as the economy rebounds. In the meantime, we hope to develop as many ways as needed to adapt our approaches and continue helping clients move their offerings forward, despite current constraints and apprehension. Above all, we want to encourage our clients to avoid letting their knowledge of consumers and their product and service offerings stagnate.

NOTES

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Practice, Products and the Future of Ethnographic Work

MARIA BEZAITIS
Intel Corporation

Ethnographic work in industry has spent two decades contributing to making products that matter in a range of industry contexts. This activity has accounted for important successes within industry. From the standpoint of ethnographic practice, however, the discursive infrastructure that has been developed to do our work within product development is now a limiting factor. For practice to evolve, we must look critically at the ways in which our current successes are indicators of a kind of stasis and that change is a matter of radically redefining the kinds of business problems ethnographic work should address and the values and behaviors associated with how we do our work.

INTRODUCTION

This paper is about the future of ethnographic practice and the organizational presence, values and behaviors required for practice to evolve. This paper is also about the ways in which the goals of ethnographic practice in industry are in fundamental misalignment with product development, the corporate divisions that remain a primary anchor for ethnographic work in industry. The path for the future of ethnographic practice in industry will not emerge from the excellent ethnographic work happening in product development organizations, even when, or in some cases if, those organizations are successful in making products that matter.

Whether in the context of the consultancy, of an actual product division and/or even an R&D organization, ethnographic practice in industry has been largely centered on making products that matter. This investment in the relevance of ethnography has been the source of the development of an entire armature of processes, methodologies, discourse and deliverables, in particular over the last couple of decades and in the tech sector, the primary context for my discussion.

Here are just a few reasons to explain why we[1] should not expect practice to evolve exclusively or even primarily out of the work taking place in product development:

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1 I propose a "we" at various moments throughout this paper. By doing so, I assume that "practice" is a preoccupation of many; that there is a community invested deeply in the question of how we can evolve practice and still maintain deep relevance to the businesses in which we do our work. In no way do I assume that this "we" is entirely coherent. Indeed, this "we' may realize itself over time as a

1. The logic of product development organizations is such that "research" only matters sometimes. As such, social scientists have found themselves often working as writers of product requirements briefs or as sales support, a fact that turns them into extensions of other business functions that do not experience the same intermittency.

2. Product development needs to see a strong correlation between the question, the methodology, and the answer. Product development processes seek to turn research questions and progress into engineering tools and instrumentation, to maintain interest in the product. This sets aside the necessary openness required by research in order to flourish and evolve and to get to the longer-term value that corporations need but don't necessarily know what to do with in the short term.

3. Cultivating ethnography leaders in the ranks of product development organizations doesn't necessarily create more opportunity for ethnographic work. While this development—the reality of ethnography leaders as product group leaders—represents a crucial success in any corporation, it is not the same as creating radically new opportunities to evolve and grow practice.

Product development organizations and their core functional groups and processes do what they need to do to make products; the cultivation of a social research culture is not their concern. [2] Importantly, alignment to differing business divisions doesn't by itself guarantee the ability to evolve ethnographic work to do new things, to expand in influence and relevance. Even the ethnographic work that takes place in market research, strategic planning, or business strategy groups remains strikingly similar to what happens in product development. Too often, new questions get answered with the same sets of techniques and approaches, with similar references for the people we study, with the same processes, with the same strong affiliations to academic disciplines as the source of the work that we do.

As ethnography has moved into a greater number of corporate divisions, the infrastructure created to function within product development has followed. In the tech sector in particular, so dominated by engineering culture, senior marketers are often engineers by training. As a result, the ethno-product development infrastructure has had a tendency to move with ethnography to other corporate divisions, such that applied

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diverse collection of communities, rather than as a homogenous entity and arguably EPIC already has moved in this direction.

2 Research can be done in product development organizations as long as it's an extension to the product line, transparent, short-term, immediate, not too abstract, functional, characteristics which make the work feel less like research and more like an extension of engineering, a version of engineering that repeats itself through social questions. This window for research grows smaller as urgency behind getting products developed grows larger.

ethnographers are always studying "users." "Real" data remains a key differentiator of its contribution. Methodology is often reduced to interviewing technique with specific environments accounting for "in situ". By extension, everyone is an ethnographer as long as they conduct interviews in situ. Ethnography remains the activity that advocates for "people in their natural setting."

Whether for business strategy, marketing, or product development, ethnographers today are equated still with the "voice of the customer," the source of usage models, the local proxy for "real" people, or more frequently, for "users". That these terms, phrases, conceptions—users, user research, usage models, ethnography as a basis for—have become a limiting factor feels increasingly self-evident. For these aren't just words and phrases. The term "users" contains an assumption about how to understand people, as if people were simply organisms that *use things*, living conduits of requirements for products. The term "usage model" is asked to account for the objective specification of activities that are important to people, often manifested as categories as vast as "entertainment" or "productivity," as if these terms signified in nuanced and singular ways. "User research" contains within it a reference to research about real people and an assumption about the still privileged role of "data" that presents itself literally in the work.

Our collaborative work with engineering has brought to ethnographic work yet another assumption about the need to create a clear trail for interpretive work, even though that's often impossible, to engage and unfold ethnographic work in terms of hypotheses, processes, and clear outcomes. This discursive space we've co-created with so many engineering colleagues spells out a faintly sociological version of engineering instrumentation. Product development needs this kind of predictability and repeatability to do its work. Consequently, the social work that happens within it needs to grow to mimic those characteristics. We have encouraged this in order to find success within product groups.

For a number of technology firms, the recession has aggravated the tendency of product organizations along with marketing and strategic planning teams to pull timeframes in, to tailor content to the immediate needs and fluctuations of "users" and "consumers." To keep their jobs, when that option exists, applied ethnographers have little choice but to turn into support for sales or drafters of product requirements briefs. This is not an inherently bad thing and clearly represents an opportunity to develop sets of new skills relevant to business interests. But it doesn't take advantage of researchers' expertise and skills.

On the topic of our future, history gives us two vastly opposing models to work with: ethnographic research for product development—the placeholder that I'm using for all ethnographic work in industry that shares language, a set of assumptions, applications, and techniques—and ethnographic research as science.

Dating back to the work of Xerox PARC researchers in the 70s and 80s, indeed to the very birth of Xerox PARC tied so closely to the reinvention of the Xerox copier, social science has been situated in relation to corporate product(s) within corporations. That relationship has proven to be central both to the identity and to the work of the individual researcher. For PARC researchers, it was a question of distance and science. Lucy Suchman's discussion of PARC's role in the reinvention of the copier emphasizes the distance from product development that was so critical to the work of that research community. Their goal, instead, was to turn the copier into a "scientific object" that warranted their involvement. "For us PARC researchers, in sum, the photocopier could not be an object that was of interest in its own right; it was of interest only as a vehicle for the pursuit of other things." (Suchman, 387)

This relationship to the object was at the heart of how PARC's value to Xerox would be established. This was social science as science, not an uncommon positioning for work within a corporate research lab. In the tech sector, product development gave ethnography an opportunity to prove that the product was of interest in its own right. As a result, ethnographic and engineering interests became culturally aligned, a critical source of business value.

"Practice" is the name I'm giving to ethnography's ability in an industry context to change and evolve over time. This change and evolution are made visible by researchers who are able to seek out the problems, methods, approaches, collaborations, and networks for addressing business challenges that attract new stakeholders within our business contexts. Ethnographic practice in industry does not persist as a function of the ongoing work in any one division or sets of divisions that espouse the same discursive and methodological armature, divisions that rely on repeatability and consistency as a source of business value. We need new types of problems and challenges to continue to grow beyond what has become a set of predictable paths and processes. We need new organizational relationships, new networks both inside and outside our corporate homes, to create the appropriate infrastructure for the evolution of practice. We need new ways of establishing relevance to the businesses in which we operate. We need to be able to do research while maintaining a commitment to being relevant to business and we need to be able to continuously redefine the parameters and content of this relationship to industry.

EPIC has grappled with these questions explicitly, but they are far from settled. I'm picking up where many others have left off. In 2005, Rick Robinson's opening to EPIC focused on theory, but what he was really talking about was practice and what it means to have one, where it comes from (not somewhere other than "here"), how you let it change, all as the first prompt to frame what this community should spend its time thinking about. In 2006, Ken Anderson and Dawn Nafus' analysis of "the real" looked critically at how ethnographic methods are appropriated and how the intent and integrity of ethnographic work gets contorted in the process that presents and shares visual data directly with stakeholders.

In EPIC 2005, Kris Cohen's discussion of how we decide who the "user" really is was in part a way to look at the transition made by "design research" in its move from academic settings to industry. His comments about the discipline and the fact of its limitations are worth repeating here:

> "A final sweeping thought about design research is that perhaps something is wrong at the level of the field's aspirations. Perhaps the goal of studying users in order to design better products for them was well suited to the *instigation* of a new field, providing the means to draw together design, engineering, computing, the social sciences and the humanities. But perhaps this conceptualization of design research is poorly suited to the task of motivating the field to *develop over time*, theoretically, methodologically…politically." (Cohen, 2005)

My corporate career is bookended by two experiences, both of which are material to this question of our future, and to what it means to develop and sustain practice. The first story begins with E-Lab, the research & design consultancy that pioneered some of the language, framing, positioning, methodologies that became commonplace by the late 90s and certainly over the last 8 years and was one of the firms that drove the development of the disciplinary infrastructure we have to contend with now. The second story will focus on Intel Corporation, an excellent instantiation of ethnographic investment in product development as well as R&D. E-Lab represents an important model for the diversity and experimentation that I believe is central to practice. Intel represents a crucial model of the successes and limitations of practice and how at the end of the day practice is as much an organizational question and a question of values as it is one of methodology and experiments.

E-LAB

E-Lab was a small consultancy in business between 1994 and 2000. It never exceeded about 45 full-time employees. Built out of early projects for Thomson Consumer Electronics and Hallmark, E-Lab evolved into an organization that consulted to product development divisions as well as sales, brand, marketing and communications groups, innovations teams, retail strategy groups. The vision for E-Lab came from Rick Robinson, a PhD in Human Development, and John Cain, an industrial designer, who believed in this intersection of people/social/culture and design and what could take place in the space between the two. The methodological and technical rigor of the research practice was framed by anthropology but not limited to it. A few of the senior researchers at E-Lab were trained in anthropology, and others in human development, literary narrative, cultural theory, and art history. We were marked more by diversity than homogeneity, in training, perspective, and approach.

Of course this was the mid-90s and there was money flowing in the US for research. Budgets were substantial. E-Lab's largest clients paid upwards of 250K with the largest budgets reaching 500K for research programs with deliverables called things like "frameworks" with "implications for product, brand direction." We were able to give ourselves room to explore and create from scratch. Proposals for clients were handcrafted with days spent thinking about how to reframe the client's question. Over time we developed a language for our "products" and our approach which invoked terms for the first time like "experience" to get at a more marketing friendly version of "context."

Anthropology provided a discipline for conducting empirical research and rigor around organizing the problem. E-Lab marketed itself in terms of anthropology early on. This marketplace affiliation with the discipline of anthropology was a means to affix a sort of credibility of offering with potential clients, but was also an acknowledgement of a deep legacy. In our qualitative social research in applied setting, our debt was not only to Mead, Geertz, and Malinowski, but to the PARC researchers who broke early ground for us all in the corporate space. The practice, however, that E-Lab researchers and designers co-produced, was not an expression of a single social science discipline, nor was it developed in relation to a narrow view of client work. The practice emerged from a shared commitment to studying people, a fascination with culture, an interest in visual work, an interest in the material world. In our research, there was always an eye towards a broader range of possible outcomes.

Expertise from many disciplines was invoked to provide the right kinds of organizational skill for dealing with the problem of how "data" evolves into what we all now refer to as "frameworks." This shift was the central differentiating factor of E-Lab relative to other design firms who in a similar timeframe started to bring ethnography into their portfolio of offerings. Our value and practice emerged out of an ability to move studies about people into the development of "frameworks," or what we later termed "experience models." When clients engaged us as a provider they did so because we fundamentally allowed them to explore their questions differently. We gave them access to new tools, perspectives, approaches. We turned their work into something more exotic, and in doing so we increased their power in relation to their own business stakeholders. We gave them new tools to work with.

The shift from data to frameworks, central to our research practice, was all about relinquishing the constraints of the bits and in their place creating a storyline about what was possible, a central narrative as organizing principle for the accumulated data. Geertz was an important reference point. As was De Certeau and Roland Barthes. The skill was essentially a conceptual one, a storytelling skill, and our "practice" gave us a place to work that out. Great stories didn't emerge from brilliant individuals. They emerged because we moved rudimentary ideas identified on sticky notes, in individual field journals, on whiteboards, often in public, out of group discussions or brainstorms across a series of stages of work. We relied on project rooms and group work. We relied on externalizing the work, making it visible because the visibility let us think about it differently. This wasn't about process; it was about the right tools for the right moments in the long road of moving from a set of research questions to a set of ways to address a problem.

Frameworks and "experience models" have become constructs that are now deeply a part of this community. In many product development organizations and in strategy groups they are an expected means to represent an explanation for how experience in a particular domain is organized. They have become a commoditized part of the work ethnographers are expected to do, produced across projects as 2x2 matrices, maps of concentric circles, discussions of behavioral modes, but they were borne from practice.

PEOPLE & PRACTICES RESEARCH

Intel is where I'm currently employed on the R&D side as Director of People & Practices Research (PaPR). Intel Corporation has a long history of engagement with social science. A small handful of people, names familiar to this community, through patience, persistence and a fair amount of invisibility, managed over a decade to change the company in a number of ways. This is no small feat.

I am the newest of Intel's leaders of ethnography-oriented organizations and so played absolutely no role in the "making ethnography matter" endeavor at Intel which culminated in 2005, the moment when Intel's organization shifted away from microprocessor product categories towards platforms, a move that has allowed the company to start to establish a more explicit orientation to its markets, both existing and new. This massive organizational shift was further refined in part by a strategic presentation led by Genevieve Bell and an Intel colleague, Herman D'Hooge, where the case for user-centered design and ethnographic research was made. The case was made in terms of product value. As a result of this important intervention, Genevieve Bell, Tony Salvador and John Sherry moved out of People & Practices Research and over to Intel's product groups to grow and run local ethnographic teams tied to the product interests of those business groups.[3]

People & Practices Research continues to reside in Intel's R&D organization, Intel Labs, where over the last 3 years we have been attempting yet another project of reinvention. We are nested in a particular part of Intel Labs called Future Technologies Research, an organization chartered with conducting long-term exploratory research in a broad range of technical fields and application spaces. This is an important detail because it means that we are sanctioned to explore and experiment in research topics and approach so long as we continue to find audiences inside and outside the corporation who perceive us as valuable and indeed critical to their own programs and objectives.

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[3] This inflection point at Intel, led in part by social science, rests on the shoulders of many years of much smaller but critical successes that brought awareness to ethnographic work inside Intel. Indeed, this event conceived in 2004, co-founded by Tracey Lovejoy and Ken Anderson, who is an 8-year veteran of Intel's People & Practices Research group, is itself part of the awareness building and influence campaign that culminated in dispersing ethnographic activity across so many parts of the organization.

PaPR's focus is not product development and this means in part that we have to find our way back into the company to be perceived as valuable.[4] It is also means that we have great freedom to make decisions about how to do what we do. The academic backgrounds of the PaPR team include psychology, design, cultural studies, media art, computer science, public policy and of course anthropology. To aspire to an ethnographic practice in a meritocratic corporate culture that fundamentally values individual work over collaborative work is a difficult proposition. The prospect of growing senior leaders that come from PaPR and don't necessarily become leaders in product development is a challenge we undertake through research programs that are centered as much on the kernel of an idea often more relevant to stakeholders outside of Intel than it is to stakeholders inside Intel.

The question of methodology is central to the everyday life of our project work. Questions of "how you do what you do," "to what end," "with what kinds of partners and tools," these questions that call attention to practice, are hard ones to ask young and brilliant social scientists to embrace. They are also dangerous questions in an industry context more comfortable with capabilities that have established paths to finding answers. But this danger often seems less threatening than the internal challenges of getting a team of researchers and designers to want to work differently than they are used to working.

From the standpoint of researchers, practice is personal. To ask young social science PhDs fresh out of world-class graduate programs and post-docs, or more experienced PhDs, to stop working in the way they are used to is arrogant and even disrespectful. Often, strong researchers perceive their practice as their own, the result of years spent developing as experts, toiling in academic work that rewarded their desire and ability to surface as promising individual scholars. This question of "practice" doesn't necessarily come easier to designers, who often have highly individuated and personal ways of knowing what they know, in spite of their skills in collaboration and demonstration.

To have viable, thriving ethnographic (social science, design) practice in industry, we need to look at what we do and take advantage of the specifics of where we are, who we are with, what kinds of tools we have or need to create to deal with our very present circumstances and with some foresight for how our work is likely to get implemented. This is as much a personal as it as a professional endeavor because it requires that we continue to alter the interests of expertise in light of what we encounter in our organizations. In this way, inventing and maintaining a practice in industry is an inherently ethnographic endeavor: where are we, whom can we talk with, what can we know, here.[5]

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[4] This doesn't mean that we don't seek to influence Intel product groups. Indeed, some of our most successful work to date is known for value delivered to product groups. However, our approach in working with product groups is not to work through the product development process towards detailed requirements. We have tried to use our engagements with product groups as opportunities to work against the discursive infrastructure I referred to earlier in this paper, and instead to introduce new language, tools and processes for doing and representing the work of social research.

Today, PaPR's identity needs to distance itself from the kind of ethnographic work that takes place now across many of Intel's product groups for some important reasons. We need to align with our organizational charter to conduct long-term exploratory research. We also need to set stage for what should emerge, over time, as a set of complementary relationships across the company with our social science and design colleagues in the product groups and elsewhere. Duplication of work makes this impossible. We have to be different to ultimately do something with them that is of value. This means framing programs that are not product development focused. Instead, our programs need to seek to identify the places at Intel where culture is central but somehow absent from the conversation.

At this conference, PaPR researchers present two great examples of this kind of program. In the first case, "ethno-mining" represents synergistic work across anthropology and computer science to develop an approach and methodology to studying everyday experiences of time and mobility. In the second case, "consumerization" is the name of a program that seeks to understand how consumers are produced by processes that reflect political contexts, entrepreneurial and policy-making contexts, and everyday life. Consumerization seeks to contextualize the descriptive research efforts of the market research and market strategy organizations in addition to the sales and positioning efforts of multiple Intel groups which assume that people are always consumers and that consumers can be described in terms of readily available needs and wants.

PaPR's organizational home within Intel R&D gives us the opportunity to look as broadly and often as unclearly or as abstractly as we do to establish new means for business relevance. The fact that we get to experiment, to reach out to new kinds of external partners, to explore and invent new methods and approaches, is absolutely a function of where we sit. This luxury comes with a cost: we have to find new ways to remain business-relevant, an absolute mandate for any kind of industry practice, to our engineering, management, marketing, human resources, design and social science colleagues. We were able to take on these risks because of the deep legacy of PaPR as a group that established itself in terms of product relevance. We continue to do so because our practice targets new kinds of questions, relies on new partnerships with individuals inside and outside of Intel.

WHAT MIGHT HAPPEN NEXT

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[5] Recall Rick Robinson's remarks in his opening to the EPIC 2005 conference. This call to open individual expertise up to new influences should be a contentious point particularly amongst those practitioners, academic and industry alike, who believe that individually accrued and academically instilled expertise is the only means by which we protect our value as individuals against the corporation. The message isn't that we morph into whatever is needed by the corporation, but rather to embrace reinvention as a means to knowing new things and thus providing new forms of business value.

I'm going to end with a few thoughts on what might happen next, a set of propositions about how "we" can shape practice going forward. These propositions suggest both a shift in values and behaviors.

1. *We need to figure out how to make reuse possible and even necessary.* This community has produced literally thousands of cases representing investigations and solutions to problems that are repeated. As a community we need to benefit from the knowledge captured by these materials. Rick Robinson's and Elizabeth Churchill's ideas on establishing organizations and assets that would indeed promote reuse would provide a big step forward to sanctioning reuse in a community that suffers a bit from "not invented here."

2. *We need to complicate our networks, usefully*. This means moving beyond the predictable sets of interlocutors, internal and external to the corporations in which we work. We might learn, for example, how to talk to economists, public policy experts, artists, government ministers and advocates and with these colleagues, seek the questions and areas of influence inside corporations where culture matters, but is strangely absent.

3. *We need to play an active role in creating the new (external) bodies to consume our work.* Research often provides an optimal opportunity to bring together distinct sets of individuals who share interests on a topic but don't routinely work together. What better way to show the relevance of work than to establish the audiences that need it? Often these organizations relate in interesting ways to the corporations in which we work. These might include partners, customers, policy/advocacy groups.

4. *We need to learn how to collaborate and how to build collectives.* Collaboration begins by acknowledging mutual interests and constraints; what we are interested and what we can't do alone. The interest side of this is easy; the constraint side more difficult. Collaboration is a risk. When we collaborate we risk lack of individual differentiation, a value that humanists and social scientists and employees who work within meritocratic industry cultures are trained to cultivate. On the other hand, collaboration allows us to meet, head-on, the value of scale and the power of collectives.

5. *We need to fund and seek funding for more professional development.* This last point is a call to diversify the opportunities available outside of the corporations in which we work. If it's time to move beyond product development, isn't it also time to grow our opportunities beyond EPIC? Practicing ethnographers and ethnographers who are invested in practice should have more opportunities for community and engagement outside of their corporate homes, opportunities that are not academically supported and directed, but cognizant of and responsive to the challenges and potential of doing ethnographic work in industry.

NOTES

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Showing the value of Ethnography in Business

JOAN VINYETS REJÓN
A Piece of Pie, Innovation Consultancy

This paper explores the value that ethnography brings to business. It uses the idea of examining the impact and value contribution of the ethnographic praxis within the innovation process and corporate culture. To specify the business impact, it highlights a framework for understanding the value that ethnography brings to a business context. Based on the ethnographic value contribution analysis of different projects and meetings conducted with our clients and with various participating stakeholders, we propose a broader framework and performance indicators for identifying and showing the ethnographic impact regarding business value. Finally, we offer reflections on the value of ethnography contribution as a growing and evolving path.

ETHNOGRAPHY AND BUSINESS

Ethnographic research applied to business has always been seen as the "unexplainable art", but now increasingly Chief Executives and Chief Financial Officers are looking to ensure that measurements of return on investment are used throughout the business. Since the economic collapse, companies have adopted a thriftier approach, requiring measured accountability for every expense, including ethnography. However, ethnographers are not used to establishing metrics and arguments that can clearly explain their value, because it looks so obvious to us: "Isn't it evident that ethnography can trigger a new product offering, a better service experience or product which will increase sales, thus increasing revenues?" Unfortunately, this understanding isn't necessarily shared by company CEOs and CFOs. As ethnographers, we are increasingly asking: "How do we communicate our value to the business world?" We often speak in terms of values, behaviours and perceptions, however business people operate in a world of numbers, and they speak in terms of value contribution and objectives: reduce cost, increase revenue, improve time to market, etc. As ethnographers, we have to embrace that world.

How to show the value of ethnography in business

In order to achieve equal importance with other management performance indicators, ethnography needs to have indicators which encompass the overall performance of the ethnographic contribution. Ethnography performance needs to be reported in a manner which is intelligible to CEOs and CFOs to effectively demonstrate the relation to efficiency and profits.

The Drivers: efficiency & alignment

If innovation is a key function of companies, then creating the environment for sustainable growth through innovation is the principal responsibility of the company managers. Management has a responsibility to establish strategic directions and build the organisation culture to embrace and encourage the generation of innovative ideas. Within this context, it seems logical that the value proposition we want to define for the ethnography should include

- the innovation process
- and the organizational culture

Let's assume that ethnography qualifies as a legitimate tool for opportunity recognition and for moving the idea forward into the innovation process as well as a catalyst for merging new practices into existing processes and adopting new practices to embed an innovative culture aligned within the organization. Our multindustry interviews with marketing directors, market research directors and innovation directors from 20 companies indicate that there are two main drivers in assessing the importance of ethnography in their value proposition for business:

- efficiency--to increase the **efficiency of the innovation process**, when relevant insights are needed for fuelling the Innovation Funnel;
- alignment:--to **align the organization culture** giving strategic direction, when there is the need for cultural change. Let's consider each one in detail.

FRAMING THE VALUE OF ETHNOGRAPHY: THE "SEED" METHOD

Acknowledging the value and impact of ethnography in a business context is always challenging, although over recent years there have been valuable precedents with interesting works such as those presented at the last EPIC conference (Cramer, Sharma, Salvador and Beauregard 2008; Flynn and Lovejoy 2008) showing the impact of ethnography on the product development process. However, the information and data on the ethnographic impact is not very usual, and less so in a business context; also, it is often available in ethnographic terms, but not in the type of language in which business people typically operate in terms of value contribution and outcomes. As a result, the lack of indicators compatible with other management performance indicators explains why ethnography has not acquired the same status and importance as other disciplines in a business context. It is for this reason we believe it is important to define an open framework to show the value contribution of ethnographic praxis in a manner which effectively demonstrates the relationship between efficiency and profits and which can also evolve and expand in view of other potential categories which may evolve in the future.

The impact and stages

Many companies build organizations incapable of meeting the demands of sustainable innovation. The functions and responsibilities that may drive sustainable innovation are spread out, divided between organizational functions that have only minimal connections:

- marketing identifies opportunities;
- R&D and design leads the products development;
- operations make the product;
- sales do the selling.

Usually there is no fluent communication or cross functional collaboration. An organization culture capable of sustainable innovation requires cultural alignment, but to change an organization's culture, people must be motivated to think differently.

Although there is not proven formula for ethnographic value recognition, based on our projects, we have defined a method called SEED (Savings, Efficiency, Envisioning and Differentiation) that identify several key factors for tracing the impact and value contribution of ethnography into business. By means of this method, we provide a clear guide to performance across the whole innovation process. Through the ethnographic value contribution analysis of different projects, we have defined these **four top drivers of business impact**. The top drivers are based on the analysis of several outcomes, projects and meetings conducted with our clients and with various participants ranging from FMCG to households and financial services companies. At the same time, in various interviews we were able to identify a series of significant outcomes to make the value contribution of ethnographic praxis perceivable in business, such as the percentage of high performing concepts transferred to the funnel, the improved communications between business units and the building of an empathetic connection with consumers.

The four drivers of business impact are:

- Savings,
- Efficiency,
- Envisioning,
- and Differentiation.

This open framework enables us to build a conceptual bridge which links the four stages of the innovation process:

- Idea Generation,
- Opportunity Recognition & Evaluation
- Development,
- and Commercialization.

The process starts with two key activities: idea generation and opportunity recognition. Once an opportunity is recognized, the idea must be evaluated; if it works, the idea is moved into development and finally to commercialization. The final test is Commercialization, customers make the final evaluation. So, learning more about an idea and relevance for the customers is a key issue but involves costs for testing and market research. In fact, the quicker a company can eliminate ideas before bringing them to this final phase, the lower its costs will be.

We can define a map showing examples of the value provided by ethnography such as figure 1.

FOUR STAGES OF INNOVATION

FOUR DRIVERS OF BUSINESS IMPACT	IDEA GENERATION	OPPORTUNITY RECOGNITION & EVALUATION	DEVELOPMENT	COMMERCIALISATION	
SAVINGS	% Decrease Ideation Platforms Management	% Decrease Market Research Success Rates	%Decrease Testing and Re-works	Reduce Risk	OPERATIVE OUTPUT
EFFICIENCY	Idea Generation Effectiveness		% Decrease Lead Time	Increase Success	
ENVISIONING	Increase alignment Improve Employees Awareness	Capitalize Knowledge Dissemination	Increase Alignment		STRATEGIC OUTPUT
DIFFERENTIATION	Increase Radical Ideas	Increase Customer Empathy	Reduce Time to Market	Improve Customer Retention Levels	

Figure 1**. Value map: open framework with examples to acknowledge the value of ethnography in the business context**

This map helps us to think about two key aspects:

1) how to identify the impact of ethnography on the innovation process, and
2) how to recognize the impact of ethnography on the "organization and culture"

Any company can use this method to identify the value offered by ethnography at various stages of the innovation process.

The ethnography value map makes it possible to embrace a wide range of experiences of ethnographic praxis which are established in the four stages of the innovation process, from Idea Generation to Commercialization. In turn, in each of the top four drivers of business impact can be a series of outcomes of the ethnographic contribution that can be identified in the business context. Thus, this framework can be used to identify the value contribution of ethnography offered in each new project or application in the various stages of the innovation process. By establishing the various outcomes in each box the impact of ethnography can be evaluated. A process in which we can benefit by posing the following questions:

- What is the type of output which adds most value to the business according to the top four drivers? Does it fit in with any of the four stages of the innovation process?
- Which of these outputs is the most highly valued by the stakeholders according to the top four drivers?
- Is the importance of this output greater or lower than the value added by other, non-ethnographic outputs?
- How can we redesign our output to offer our stakeholders greater value in accordance with each of the four stages and top four drivers?

By answering these questions, and with the compilation of the framework using the results of ethnographic praxis, we believe it is possible to identify the added value and impact of ethnography in the business context.

Now, let us assume that the outcomes of the ethnographic praxis used to fill in the various boxes are classed as legitimate impacts on the business – i.e., they have real value. The next task would be to make a rough qualitative evaluation, considering the contribution of ethnographic outcomes in relation to the top four drivers of business impact:

1. Savings. Does the ethnographic outcome improve profitability and cost reduction, saving time and money?
2. Efficiency. Does the ethnographic outcome lower risk and increase effectiveness, helping the company meet its innovation needs and obligations?
3. Envisioning. Does the ethnographic outcome help in increasing alignment and communications across business units, sharing market knowledge, ideas and developments?
4. Differentiation. Does the ethnographic outcome help in embedding the competitive advantages of the offerings, creating an emphatic connexion with consumers?

MAPPING THE VALUE RECOGNITION OF ETHNOGRAPHY: EMERGING VALUE PROPOSITIONS IN BUSINESS

As evident from our framework, the variety of approaches to ethnography and its application involves different options with different implications. Naturally, the question is how do I decide which are the best outcomes to demonstrate the value addition? To answer this question, it is necessary to develop a systematic approach to the company. It should start with a sound understanding of the organisation, culture, structure and innovation process. With this knowledge it is easier to limit and focus the value contribution on the framework which is more significant for their innovation process: process, stages, gates, metrics, and internal organizational characteristics that together define the frame within the company to define and pursue their innovation.

For example, consider the organizational culture aspects. What is the existing innovation infrastructure of the company? What type of relational skills has it developed? Does it involve people who understand the company's capabilities, strategy, and customers? What type of value system assessment is it comfortable with? The answers to these and other similar questions can tell us about the company's innovation culture, relevant roles and interactions, and how it perceives the value in the different activities which contribute during the innovation process. Therefore, before starting to establish the framework of ethnographic value it is important to observe and gain an in-depth understanding of the corporation and its innovation landscape. An important issue is the need for continued experimentation–around value creation as well as value recognition.

We believe the framework holds potential opportunities for organising and shaping the ethnographic value contribution in diverse industries and markets. However, an important issue relates to the appropriateness of this framework to particular contexts and future evolvements.

An important hallmark for the evolution of any model is the emerging new dimension of social innovation. This surging demand for innovation to resolve existing social, cultural, economic and environmental challenges for the benefit of people and the planet is creating an important market, not only for companies but also for the application of ethnographic praxis. For example, not only to identify new opportunities and understand behaviour, but also to innovate in new methods and techniques which can be useful in the social processes of innovation, such as open source methods and techniques. Therefore, it is logical to think of the evolution and consideration of different value propositions of ethnography in business, and much more so in the emerging context of social innovation and social entrepreneurship.

Examples

We recently worked with a Fast Move Consumer Goods company. We learned that our data could be packaged in ways to be memorable and consumable for marketing, sales, product and communication team members. Therefore, to ensure culture organization alignment, we set up an intra-platform knowledge management system to disseminate all the knowledge and experienced captured during the research, the idea generation and opportunity recognition. Subsequently, we have also seen how the platform is mainly used across business units and departments as a database to continue to refill the idea funnel and provide insight to inspire and encourage idea generation, design and communication. This "ethnographic knowledge" facilitated by the platform is further devoted to identify strategic and tactical insights of benefits to product managers, brand teams, business units and corporate leaders; to build conceptual bridges that relate market insights to the specific areas of interest and business recommendations tailored to the brand, business unit, etc.

As a way to visualize all the value with the Director of Market Research we launched a weeklong seminar "First Feel" to communicate valuable insights throughout the company, and make them "digestible". Our team created a set of tools and activities to insert ethnographic insights throughout the corporation. In this event, we were able to deliver clear value in aligning the organization culture and teams with customer understanding. Additionally, we learned that our ethnographic data is highly relevant to all corporate audiences because it provides them with stories of "real people" that they remember, adding richness in a way that quantitative data does not. Also, both the platform and the event have enabled the company to put in place a more empathetic approach, with less internal documentation, enhancing communications between business units and reducing the "silo" culture. However, now the company also views its relationship with its customers not just a customer relationship management initiative but as a partner in innovation.

SUMMARY

Although we are dealing with a task in progress, we have attempted to define an initial framework to identify and show the value of ethnography in the business context; to build an example of how the return on the ethnography investment across the whole innovation process requires the understanding of the various ethnographic activities that drive market research and generate revenue. At the same time, we have attempted to show how the bulk of our value proposition comes from the efficiency that we can create in a company's operations and culture throughout the innovation process.

The specific implementation of this model might evolve over the time as companies and ethnographic praxis experiment with different business models, processes and organizational cultures. However, there is one factor which will always endure – ethnography and its praxis in industry will become more of a focal point and gain importance over the coming years.

Finally, demonstrating the value of ethnography in business is not only a tool for showing ethnography's true value, it can also illustrate how and when the ethnographic approach can be most effectively used as a tool to consistently generate the highest profit and efficiency. It's time to find common and acceptable guidelines by which our work can be measured, and the aim of this paper is to plant the first SEED.

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WHAT EUROPEAN BUSINESSES EXPECT FROM US

FILIP LAU
ReD Associates, Denmark/Germany

This paper presents considerations of strategies for communicating the value of 'business anthropology' and 'insights' to sceptical business audiences, based on a number of studies with a total of 47 interviews with executives in 27 large companies in mainly Europe, but also the US. The paper will present four major insights deriving from the research and suggest how 'insights', 'business anthropology' and ethnography can potentially be applied to new areas within business in dire economic times, including, but also going beyond, the traditional areas of application, i.e. 'innovation' and 'marketing'. I argue that the Practice can be expanded by moving beyond the identification of potential areas for innovation (the so-called unmet needs of users/customers/consumers/citizens), for instance to the identification of areas suitable for simplification: where users are currently having 'over-met needs', i.e. areas the user perceive as irrelevant and of little value. The paper will also explore the role of 'business anthropology' at a national policy level in Denmark and in the business community in Germany specifically.

INTRODUCTION

> We tried to hire a number of anthropologists. We got that advice from [consultancy name]. But it didn't really work. The insights they came up with were too banal. And we needed a way to receive and implement their recommendations in the larger organisation. We had no idea how to use the insights. (Respondent 6, working in B2B company with experience in employing anthropologists. No anthropologists are employed in the company today. ReD Associates 2005b)

In 2005-6 the Danish government considered funding a new high-profile research institution focusing on two themes: 1. 'Applied business anthropology' (meaning the practice of anthropology applied on concrete business problems), and 2. 'The front end of innovation' (meaning the initial phases in an innovation/product-/service development project). As part of the effort to build a new research institution the Danish government initiated a number of studies. These would help ensuring that should the research institution be built, the concept behind it would fit both academic and commercial needs. Also, the studies had as aim to improve the chances of meeting the government's ambition: building an institution that would be perceived as a relevant, bold and robust initiative internationally.

The three studies were:

1. ‘Applied Business Anthropology’ (ReD Associates 2005a). This study had as aim to uncover how the academic community in Europe and the US had defined the field, i.e. its core theoretical and methodological tools and its leading institutions/individuals. This study also looked into how Danish academic institutions had organised and positioned themselves with regards to business anthropology, assessing the need for a new research institution in Denmark.
2. ‘Businesses’ View Upon Business Anthropology’ (ReD Associates 2005b). This study had as aim to uncover how businesses saw the role of ‘business anthropology’ and other social sciences in a commercial context.
3. ‘The Academy for People-Centric Innovation’ (ReD Associates 2006). This project had as aim to give concrete recommendations on how a new research institution should be built, i.e. organised, financed, and lead. This third study was conducted in close collaboration with a number of international academic and commercial experts in the field.

As mentioned above, the second study focused on applied business anthropology and its relevance to the international business community. I headed up that study, aiming to understand the expectations from businesses. If they should be engaged in the research institution, its researchers and its students, as either collaborators, clients and/or future employers, what should the overall concept behind the research institution then be to make it attractive? I will primarily use the second study mentioned above as a baseline for this paper. Furthermore, I will refer to a fourth study (ReD Associates 2009, forthcoming) unveiling how corporations in Europe – and especially in Germany - develop and exploit ‘insights’.

The study (ReD Associates 2005b) was conducted among 22 C-level persons in 13 large companies in Denmark, Sweden, Germany and the US. The respondents and respondent companies were selected on the basis of four criteria:

1. Size: The corporations should be of a certain size to be considered potential partners/interested parties/spussy2200ponsors of a new research institution.

2. Well-known brand name: In order to give the study’s recommendations credibility among politicians and high ranking civil servants it was seen as important to recruit respondents from well-known companies.

3. Potential interest in the ethnographic practice/previously shown interest in the practice: The companies should have practical experience with or the potential to show interest in ethnography as part of business development, product/service development and/or marketing.

4. Accessibility: Respondents should be recruited within a certain time frame, making people accessible through existing networks within ReD Associates and The Ministry of Economic and Business Affairs preferable.

The study revealed companies' perception of the 'applied business anthropology' practice as well as their hopes and concerns for a new research institution focusing on this area. The respondents were both asked to reveal current practices, as well as to give the interviewers advice on how best to position, conceptualise and promote the research institution to be.

FOUR MAJOR INSIGHTS

Seen as a whole, there are four major insights from the study:

1. The ethnographic practice is seen as commercially relevant by the participating companies.
2. The ethnographic practice must use business conventions and business symbols to be perceived relevant.
3. Translating insights into commercial opportunities is key – and the majority of this work has to be done by anthropologists, the actual social scientists developing data-based 'insights'. This essential translation activity should not be handed over to other people in the client organisation, but can eventually be developed in collaboration with people in the client organisation in order to create ownership of insights, ideas and recommendations.
4. The success of the research institution to be depends on whether it can adapt to the fact that companies are on different experience levels when it comes to applied business anthropology – from absolute beginners to absolute nerds.

Insight 1: The practice is seen as commercially relevant by the participating businesses

Overall, the interviewed respondents can see the relevance of the ethnographic practice in a business context and welcome the idea of establishing a research institution focusing on applied business anthropology. In this study (ReD Associates 2005b) they are especially fond of the idea of linking the methodology and theoretical toolbox of the anthropologists with the front end of innovation, but later studies (e.g. ReD Associates 2009) show that the theoretical and methodological tools of anthropology and ethnography have the potential to take a more holistic role in firms. With regards to the Danish government initiative respondent companies have different motivations and arguments for endorsing the initiative. One respondent says:

> We have streamlined our development process to an extreme degree. We have divided development into phases with milestones and requirements for documentation. And it looks really good on paper. But it also gives us a lot of problems. One of the issues is that we look at the world through our product portfolio. Another issue is that we never learn as an organisation. One project follows another and we often forget to ask ourselves: 'what is the big picture here'? (Respondent 7, pharmaceutical industry, ReD Associates 2005b)

Companies across industries seek ideas for how to organise 'the front end' and 'to get the big picture'. They have the impression that applied business anthropology can help them obtain this. A respondent says:

> Our back-end part of the development process is running very smoothly, using a protocol. Now [after doing an ethnography-based project] we have a protocol for the front-end also. What we have now is a really, really good indication of how we will deal with these things in the future. We learned the *discipline* of doing front-end projects from [consultancy name]. (Respondent 10, leader of the 'concept lab' in consumer goods company, my italics. Ibid.)

To a number of respondents, getting to know the practice of 'applied business anthropology' is the first time they encounter a model, or approach, that can help them streamline the early stages in a development project. They also acknowledge that anthropology gives them a somehow less biased/distorted view upon the users, and that this view is both more 'messy' (as in less classifiable) but also more holistic than traditional market surveys.

Insight 2: Business conventions, business symbols

The study shows that symbols and the staging of the practice are important. To be seen as a credible partner, a new research institution should put emphasis on 'business' rather than 'anthropology'. The connotations to 'anthropology' were so negative that several respondents suggested removing the term from the research institutions' name.

> To me, this is not a carnival. But I think many companies will perceive this as carnival and circus. In that regard, I think staging and symbols are important. This place needs an aura of business – without being a business school. (…) Please, no hippie girls and discussions of Marx and Jung. It just doesn't work. And it's really a big danger. (Respondent 10, consumer goods company. Ibid.)

One of the key symbols from academia that the new research institution should be aware of is 'abstract theory'. Even though the respondent above use examples from sociology and psychology to illustrate his point, the quote above shows that abstract theory is not a key priority for potential collaborating companies – it should at least not be presented as a core 'front stage' asset of the institution. And generally speaking, throughout the research phase it became eminent that the term 'anthropology' has an image problem. Basically, the term seems polluted in a business context. While explaining how 'business anthropology' can be applied to business problems during the interview sessions with the respondents, almost none of the respondents felt that notions like sociology, anthropology or ethnography would be helpful in the selling and promotion of the research institution to be. The respondents suggested that terms such as 'world class', 'user insight', 'prototypes', 'product development' should be incorporated as selling points. In other words should the research institution to be have a much bigger focus on impact and products/services on its shelves rather than its academic toolbox and capabilities.

Insight 3: Translating insights

The single most important recommendation from the business community was that anthropologists and ethnographers must have a solid business understanding. It's almost as if the anthropologists should start every project by using their toolbox to investigate the corporate culture of their client and understand how things work inside a big organisation in order to make impactful recommendations coming back from the field. One respondent puts it this way:

> Theory and deep understanding of the field is not enough. You need to be able to understand the conditions of the business, have a good grip on situations and be able to translate insights into engineering and marketing language. (Respondent 13, software industry. Ibid.)

Another respondent suggested:

> It is not enough just to use anthropology to uncover unmet needs. The next phase, the translation of these insights into something useful is really important. This is where the major battle is fought in our organisation. *If you cannot cope with that, your insights will never be used anyway*. "So – we got a few insights and it was pretty fun to do, but what the f… does it mean?" It's absolutely key that if you want to make anthropology successful you have to take it further, making it usable and commercial. (Respondent 10, consumer goods, my italics. Ibid.)

As one respondent put it: *"You must be able to answer the question: 'and so what?'"* (respondent 13, software industry. Ibid.). The majority of this translation work has to be done by anthropologists themselves. It should not be handed over to other people in the client organisation.

Insight 4: Different levels of experience

The last major insight is dealing with the experience level the different respondent organisations have when it comes to applied business anthropology. Basically, there are four groups of organisations:

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- *Aha!* – 'absolute beginners'; these respondents almost believe it is part of their job to be open to the practice because it is 'hip' or 'sexy'. Interestingly, this holds for respondents holding both senior positions as well as respondents further down the corporate ladder. Many in this group have heard about ethnography-based projects through colleagues outside their firm, or read about topics such as 'user-driven innovation' in more popular literature, such as management magazines and non-fiction bought in airport bookstores, but never experimented with it themselves.

- *Success experience* – these respondents are turned on by discovering the field after one-two projects, thrilled by the feeling that the anthropological toolbox provides them with a new world view. For some of these, the key to this success experience can be described as 'seeing is believing'. Only after having experienced an ethnography-based project first hand are the benefits of anthropology and ethnography clear. (It is worth mentioning on a side note that neither respondents in the 2005 study nor the 2009 study had enough bad experiences to share stories about this – or, even worse, abandon the ethnographic practice.)
- *Experienced* – the respondents in this category have repeatedly done development projects using an anthropological approach the past three years or more.
- *Professional* – these are professional buyers and 'absolute nerds'.

These four groups all have distinct needs and expectations to the practice. These can be seen in the table below.

	Aha!	Success experience	Experienced	Professional
Experience with business anthropology	None	1-2 projects	Repeatedly done projects past three years	Professional buyers/ absolute nerds
Biggest concern	Approval of project by upper management	Internally: picking up on the insights	This project will not have the same wow-factor/magic as the previous ones internally	Banal insights
Success is…	To solve all end-user-related issues in one project	A tangible product/service on the shelves after X months	Recommendations applicable in many departments across organization	Insights fit into our pre-defined system of capturing and sharing internally
We do not care so much about…	1. Theory 2. Data quality 3. Exposure to methodology/the field	1. Theory 2. Secondary data management	1. Methodology	1. Internal buy-in 2. Exposure to methodology/the field

TABLE 1 Different experience levels, different concerns when it comes to business anthropology

I will now go through some, but not all, elements in the table above.

Concerns – The more experienced an organisation, the more concerned it is on getting 'high quality insights', meaning insights that are concrete, deep, surprising, fact-driven, anything but banal – and mirrored up against theory (without theory, 'insights' are perceived as obvious observations, i.e. data compiled by designers with video cameras).

Success – The non-experienced organisation has unrealistic expectations to what (or how many) issues one initial study can help solve. Especially when taking into account that these organisations do not have their own set-up for applied business anthropology in place and most often are dependent on external help (consultants) on a very limited budget. On the next stage of maturity, organisations often aim to get a concrete product on the shelves as a result of a study. The logic typically goes like this: 'one project equals one product'. But as many of us knows that is not always the reality. On the final level of maturity ('professional'), successful insights and recommendations are obviously deep and original – and fit into a pre-defined system for internal distribution.

We do not care so much about – Finally, a pattern emerges around respondents' non-priorities. For the more inexperienced organisations theory is abstract, not commercial and not interesting. Also, visits to the field are left to professionals and the experienced. For the 'experienced' group methodology is not a priority any more. Obviously, methodology must be perfect, but it is not an interesting topic anymore.

All in all, the categorisation of the maturity level of organisations with little or a lot of experience with applied business anthropology shows that organisations have different expectations and priorities when conducting projects with anthropological tools, depending on their experience. These expectations and priorities can be taken into account when working in an organisation or for an organisation.

THE WIDER IMPLICATIONS OF THE INSIGHTS FOR ETHNOGRAPHIC PRACTICE IN INDUSTRY

As mentioned above, the research (ReD Associates 2005b) indicated four major insights:

1. The ethnographic practice in industries is seen as commercially relevant by respondent companies.
2. The practice must use business conventions and business symbols to be perceived relevant.
3. Translating insights into commercial opportunities is key
4. The success of the institution depends on whether it can adapt to the fact that companies are on different experience levels when it comes to applied business anthropology.

Of the four insights mentioned here, we at ReD Associates believe that no. 2 and no. 3 have the biggest immediate implications for current ethnographic practice in industry today. I will elaborate on why we believe so in the section below.

It is necessary to further expand the commercial application of the business anthropology practice in today's economic climate

Throughout this paper, 'business anthropology' has more or less implicitly been connected with the practices of innovation and marketing. In today's economic climate it might not be ideal to link anthropology too closely with innovation only. It is simply too narrow a perception of how the anthropological toolbox can be exploited commercially. One of the respondents from the 2005 study coined a potent version of business anthropology this way:

> We need to understand our users' *perception of value* better. What is the value of our products to them? This is what you [the interviewer] previously called 'relevance'. We need to know the value and we need to act according to this knowledge, for instance in relation to new products, new offerings, new activities. But also with regards to price points, what type of stores, and so on. And the key to decisions on all of these issues is whether they bring value to the user. (Respondent 10, consumer goods, my italics)

This "perception of value" can generally speaking be exploited by corporations in two ways: *either* the company can improve existing offerings, developing new products and services in line with users' "perception of value". *Or* the company can *simplify* its offerings. This can be done by cutting away what is perceived as less valuable to the end user. This is a potent way of "translating insights into commercial opportunities" (a reference to one of the four major conclusions from the study previously introduced in this paper, see above). In other studies conducted by ReD Associates, we have seen how much value can be generated by cutting away the non-essential. For example, we have seen how pharmaceutical companies can save tens of millions of US dollars by diversifying packaging and cutting away exclusive packaging of devices aimed at consumption in hospitals. The reason? No one actually sees these nice packages at hospitals except the 1-2 staff members in the 'back stage' delivery area, where the devices are unwrapped and put into larger containers (This is not the same as saying packaging does not matter. It might, actually, be a very good idea to keep the exclusive packaging when the patient is discharged from hospital and needs to use the devices on his/her own at home) – or if packaging is a key marketing parameter in advertsing (which tends to be the case in the US. Another example: We have seen how breweries can save tens of millions of US dollars by only giving away merchandise and other sponsored material to clients and end users that are perceived as truly valuable to the receivers, instead of one-size-fits-all t-shirts, ashtrays, umbrellas and caps. Understanding *what* matters *when* and *why* should definitely not be seen as a key to develop new and better merchandise only, but also as an opportunity to cut away existing merchandise that does not work. Together with our client we went through the numbers and estimated how much could be saved by cutting away non-efficient merchandise, and the total sum ended up being more then US$ 50 million that could be spent on other more relevant initiatives.

And so on. The toolbox of the anthropologist has the potential to not only be exploited commercially through the identification of *unmet needs*, but also by identifying so-called *over-met needs*. Our experience is that such recommendations must be handed over to the client by adapting to his her language (in other words, we try to use "business symbols and conventions" - another reference to one of the four major conclusions from the study previously introduced in this paper). When handing over recommendations to clients, we tend to talk about "decreasing churn" instead of talking about "increasing loyalty". Instead of talking about "profits" we talk about "margins" and "EBIT". Instead of talking about "conclusions" we try and talk about "return on marketing dollar". Et cetera. The analysis, recommendations and contents are the same as in other commercially driven anthropology-based projects. But the language is tweaked a little, the power point slides looks a little drier and a suit goes a long way.

EXPLOITING THE INSIGHTS IN GERMANY

Shortly after the conclusion of the 2005 study ReD Associates decided to open a branch in Germany. I was asked to head up this new office. Some of the experiences from the study were put into action in the effort to build a German client base. We soon found out that most German companies are on the 'aha!' level (a reference to the four maturity levels of organisations working with ethnography introduced earlier in this paper) and it was a challenge to crack a market where innovation equals engineering and 'applied business anthropology' as a field does not exist.

Tellingly, at EPIC 2008 in Copenhagen, only five participants came from Germany: one of them was me (a Dane), another was a colleague of mine (a German), the remaining three were from consultancies – and none of the larger German companies was represented.

In the following, I will give a short introduction to the climate for ethnographic practice in the German industry with a special focus on the academic stance towards commercial exploitation of ethnography. Then I will elaborate on the two of the four major insights from the 2005 study.

The relationship between academia and business in Germany: Vorsprung durch Technik

Germany is the biggest exporting nation in the world. Since 2006 the German government has actively pushed an agenda trying to boost the confidence of Germans by highlighting the country's proud history within innovation and product development. Through an ambitious nation-wide campaign that included publications, ads, seminars and award shows with the overarching theme/title 'Germany – Land of Ideas' the government has been promoting innovation and business development as one of the core pillars in the nation's joint effort to sustain Germany's growth and future (Langenscheidt 2006).

Germany is a nation with strong links between businesses and academia, especially when it comes to engineering and the natural sciences. The network of engineer-based 'Max-Planck-Institutes' is a commonly used example in Germany of how businesses and scientists can collaborate and create extraordinary results together. The strap line and company ethos of German car maker Audi – *Vorsprung durch Technik* ('Advancement through technology') – is often used to describe the corporate culture in companies throughout the nation.

Obviously, 'anthropology' exists in Germany, but the practice is most often not linked to commercial activities. A German respondent from the 2005 study captured the business/academia climate when he said: "*We often hear from the universities that we are not a suitable environment for anthropologists because we are a part of a company that produce concrete products.*" (Respondent 9, leader in automotive-funded think tank).

There are exceptions, though. The Hasso-Plattner-Institute for Design Thinking at the University of Potsdam collaborates with d-school at Stanford University, and the privately-funded Zeppelin University in Friedrichshafen focuses explicitly on educating its cultural science students to collaborate with businesses and 'creators' (as in 'designers' and 'marketeers'). Also, graduates with an M.A. degree in Cultural Studies from The University of Lüneburg are often employed in production companies and/or advertising agencies to ensure the inclusion of 'cultural aspects' in the development and promotion of products and services. But in general, it is difficult not to get the impression that the dedicated sociology-, anthropology- and ethnography institutes at universities across Germany view the commercial exploitation of qualitative social science with a great deal of scepticism.

That Germany is uncharted land when it comes to ethnographic practice in industries is also visible in the (lack of) literature reflecting on the status quo of the field in Germany. Plattner (eds. 2009) stands remarkably alone in his examination of 'design thinking' in Germany. The fact that he argues that 'users' and 'consumers' are relevant factors in new product development is quite a statement considering that his readers are typically brought up in the engineer- and lab-savvy German corporate culture. Steinhof's paper (2009) gives a rare sneak peek into how corporations like Deutsche Telekom and T-Mobile work scientifically with ethnography and insights development in innovation processes at the joint development center T-Labs, and Stahl and Meyer-Höllings' article (2008) introduces the reader to 'Empathic design in der BMW Group' in an otherwise engineer-focused compendium of articles on innovation management. A thorough literature study on how the ethnographic practice is described in German corporate culture would be relevant to conduct in order to get a more exhaustive overview of the status of the field in Germany. However, after two years living in Germany I have not witnessed a steady flow of academic articles, papers or books examining this area explicitly.

Summing up, the status of university education and academic literature in the field give us two rough indicators on how the academic community in Germany prioritises the commercial ethnographic practice: it has a low priority.

Ironically, for the relatively few German companies working seriously with ethnography a strong academic collaboration is necessary to recruit decent staff, and to create the appropriate feeling of seriousness in a national culture where universities, science and academia plays a big role in the public debate and in corporations. Due to the strong commercial-academic link in engineering and the natural sciences, companies often seek to create an explicit academic connection for employed ethnographers both to make the science more credible inside the company, but also to attract ethnographers and anthropologists (ReD Associates 2009). One respondent from a well-known German corporation expressed it this way:

> We recruit our staff from academia and it needs to be clear to them that they can have an academic career working here. It takes time [for us] to get accepted in the academic community and we are working hard to get that acceptance in order to be perceived as a credible employer. Papers, conferences, articles, and recruitment symposiums are just some of the tools we use. For instance, all academic staff must publish papers and articles about their projects. And 20% of our projects are of a pure academic, scientific, non-profit nature. (respondent from the ReD Associates 2009 study)

The quote above, as well as the quote from the automotive think tank coming out of the 2005 study (shown in the first lines of this section of the paper), illustrate German businesses' need for a strong collaboration with academic institutions. The two quotes also show the low interest from the academic community to engage in a fruitful relationship with corporations. How many participants from German universities will EPIC see this year?

The insights in a German context

In the following, I will analyse how two of the four insights from the 2005 research can be applied in a German context. The two insights are:

1. The ethnographic practice in industries is seen as commercially relevant by respondent companies.
2. The practice must use business conventions and business symbols to be perceived relevant.

In the following, I will first take a look at German consultancies offering ethnographic services. Then, I will look at how German companies (i.e. potential clients) perceive offerings coming out of a consultancy actively promoting ethnography.

German consultancies offering ethnographic services are either very small or individual consultants in a bigger 'mother consultancy' - Ethnography is very much still a niche practice in this market. The German community of practitioners is small. Most consultancies specialising in this field has a total staff of 1-4 (ReD Associates 2007). However, a number of larger advertising agencies (such as TBWA), management consultancies (such as McKinsey) and design consultancies (such as IDEO) have been actively recruiting ethnographers as part of their teams in their German branches in 2007-9 (ibid.).

German companies typically perceive and purchase ethnographic services as market research - The biggest immediate development actors in the practice in Germany should be aware of is the tendency towards making ethnography part of market research (and, hence, not part of solving other, more high-level problems in corporations). This tendency towards market research is most likely deriving from the German tradition of putting development of new products and services into labs, and after the development phase reaches an end the marketing department takes over to push the newly developed product to customers. The biggest task for the practice in Germany today is to change this logic from inside-out to a more holistic ethnography-based outside-in logic towards corporate problem solving of any kind. This might be the case in many markets, but Germany seems like a special case given its deep roots in engineering. In other words, German companies are likely to purchase ethnographic services (which in some regards is good, it shows there actually is a demand), but the service is often boxed as 'market research' (which in some regards is bad, since market research is a low-priced commodity with purchasers typically placed fairly low in the organisation's hierarchy).

Case: Illustrating how insight #2 "The practice must use business conventions and business symbols to be perceived relevant" is the biggest challenge for a successful breakthrough in Germany – The second insight from the 2005 study is especially relevant in a German context because of the status of ethnography (ethnography = market research) as described above. Being a consultancy with a deep ethnographic history, but with clear ambitions to be perceived by clients as a strategic problem solver, and not a market research agency, the 'market research label' was (and still is) a constant positioning challenge for ReD Associates Hamburg when in dialogue with potential clients.

Especially a German automaker was a challenge for ReD Associates in Germany. We had a dialogue at the executive level of the organisation about a specific problem on the future of environmentally-friendly automobiles. Due to the corporate culture in Germany, the executives insisted on having ethnographic specialists taking part of all meetings negotiating a study. The only specialists on qualitative research in the company were to be found in the market research department. They did not share the view that the toolbox of the anthropologist can be used to solve more holistic problems and/or provide insights in the early phases of product development. Even though we were on good footing with senior management, our inability to convince the market research department that our framing of the problem and our suggested methodology were appropriate were part of the reason for us not getting the project in the end.

This case illustrates that in Germany, even though top executives are willing to experiment with new tools to solve new problems in new ways, the corporate culture of including specialists in negotiations with consultancies can be an obstacle – particularly if the specialists do not share the consultants' view on how to solve the problem or if the wrong specialists are casted to be the sparring partner with the consultancy in the purchasing process. At ReD Associates, we learned the hard way that senior management will always lean towards their own specialists' recommendations and will never (never) overrule their specialists' recommendations, or their specialists' decisions where the specialists have mandate to decide – also if the specialist is far down in the hierarchy. (On a side note: what impressed me personally the most in this story was that the specialists had the guts to clearly speak against senior management's preferences. We are talking about a low-level market research manager versus a senior vice president here).

Summing up: Doing business in Germany

ReD Associates has been working with German clients since 2005 and has had a permanent office in the country since 2007. When the US-based management consultancy McKinsey & Co. first established an office in Germany in the 1960ies they soon learned that German clients were different from their well-known American clients in a number of ways, among them that for Germans, a so-called 'black box' in problem solving does not exist – all questions can be solved in a transparent process and Germans feel they have the right to know in detail how each sub-element in a study has been developed and concluded upon. Another key difference between German and US corporate culture was that Germans clients were (are) extremely patient and detail-oriented – there is always time to discuss even the slightest detail (see Bower 2004/1979).

I knew about these observations when I moved to Hamburg in 2007, but thought the mindset of Germans had changed slightly since the McKinsey's consultants had experienced them back in 1960ies. To my surprise, they had not changed a bit. Establishing a consultancy in Germany is a long journey and patience pays off. That said, working in Germany, with the specialised staff in some of the world's largest and most interesting corporations have been an interesting experience I would not live without.

APPENDIX

List of respondents (ReD Associates 2005b):

1. Senior Vice President, media group
2. Senior Vice President, national railway
3. Director, international telco (former national monopoly)
4. Director, international retail chain (FMCG)
5. Director, national broadcasting corporation
6. Director, B2B company, world leader in its industry
7. Director, pharmaceutical company, world leader in its field
8. Director, international consumer electronics company (cell phones)
9. Director, think tank funded by corporation in the automotive industry
10. Director, consumer goods (toy industry)
11. Director, pharmaceutical company (devices), world leader in its field
12. Director, consumer electronics (white goods)
13. Director, software development company, world leader
14. Director, international consumer electronics company (cell phones, world leader)

Note: some interviews were conducted as group interviews with two respondents from the same organization together at once. The total number of respondents in this particular study was 22.

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Contextualizing customers

TRULS ERIK JOHNSNEN
Telenor Group Business Development & Research

PER HELMERSEN
Telenor Group Business Development & Research

This paper is based on fieldwork in Pakistan and Malawi and focuses on the importance of communicating contextualizing stories to HQ and business developer teams. By means of an explorative approach - even in highly structured commercial projects with formalized needs - we've uncovered findings and generated understandings that would be hard to pinpoint from a desktop-based pre-study or demand driven fieldwork. These findings in turn have proven to be important tools for said business developers in spite of the fact that they were not included in the initial fieldwork specification. Since our respondents are seen, heard and understood as far as possible within their own framework of values, priorities and aspirations, we, as researchers, are in a position to communicate a well-grounded and more refined picture of their daily lives rather than merely communicating the measurable hard facts back to corporate business developers.

INTRODUCTION

With local and well-established telecom markets rapidly becoming saturated, major players in the mobile telecom industry are turning their attention to the so-called emerging or growth markets in Asia, Africa and Latin America. Their strategies for doing so were initially based on business models developed and tested in more familiar surroundings, and were for that reason inadequate in markets lacking infrastructure, with unfamiliar (and often unfriendly) regulatory environments and where the majority of prospective customers have a disposable income of USD 5 a day or less.

A natural first step into such markets is to target consumer segments that share the lifestyles and attributes of Western consumers, i.e. the urban upper and middle classes and the upwardly mobile in lower classes. It was quickly recognized, however, that the real challenge and profits are to be found elsewhere. Global operators are therefore currently exploring the untapped market potential at the so-called "base of the pyramid" – the four billion prospective customers who constitute the largest and fastest growing segment of the world's population. In doing so, they are forced to expose various tacit assumptions, reexamine conventional wisdom and to generate new understandings of who these four billion persons are and what they aspire to be.

When entering new markets with fundamentally different needs, wants and possibilities mobile telecom operators are increasingly turning to ethnographic field studies to serve not only as a 'reality check' for business model developers, but also to generate a general knowledge base suggesting future service opportunities.

The common way of delivering results from rapid ethnographic fieldwork in industry has been to present "key findings" to suit the needs of business development teams. A more subtle and equally important method is to convey the rich context of findings. In the following we will describe our experiences with contextualization as an integral part of the delivery to give the understandings and applications we have developed more impact.

DOING RESEARCH ON MOBILE TELEPHONY

Telenor has since the early 1990's had a strong focus on research on the social implications of information technology, and since the mid- to late 90's a strong emphasis on the mobile telephony and the societal changes of which it has been a part. From the early stages of focusing on the mere impact of the mobile phone as the next step in the evolution of the telephone, to the more profound cultural, cognitive and behavioral changes that come with a technology that changes how we perceive and relate to our surroundings. From the very start Telenor has focused on the need to use multiple methods to understand the full range of implications of this technology. From the high-level statistical analysis of data traffic, the increase in short message services (SMS) (texting) and media message services (MMS) to the deeper studies on cultural changes and how technology change behavioral patterns.

Since 2004 a great share of the Customer Insight work in Telenor R&I (from May 2009 known as Telenor Group Business Development & Research) focused on our markets outside the Nordic countries, and we've had the opportunity to look into such diverse issues as social networks among youth, regional cultural differences and similarities among youth and small- and medium sized enterprises in locations from rural Bangladesh to industrial towns in Ukraine and remote locations in the Nordic countries.

Our studies have focused on communication patterns, social- and business network, consumption patterns, cultural influences, similarities and differences between our markets, aspirations and consumer needs and wants in a broad specter of segments. And more often than not, we go into our projects with an explorative perspective where the need to establish knowledge as thoroughly and deeply as possible is more important than just gathering hard facts.

THE RESEARCHER AS INTERPRETER AND MEDIATOR

Research on the social implications of telecommunication technology is based on a need for the company to understand how our customers interpret our products and put it into use. This knowledge will in turn be utilized in everything from segmentation models to product development. In other words: Strengthening our business through end user knowledge and understanding. Our approach in most of our studies is to take a bottom up perspective. Through close dialogues with our customers we're able to create an understanding on how ICT's change and are changed when it meets real users. The aim is to uncover patterns that are not visible or evident to the business developers based at HQ.

With such an approach we rely heavily on four sources of information:

- Formal interviews
- Informal interviews
- Observations
- Expert interviews

Informal interviews and observation contribute a great share of our knowledge and understanding of contexts, yet we also in most cases support the informal approach with expert interviews and formal interviews of the more traditional type. Expert interviews can in the cases presented herein be health workers, actors in the micro-finance institutions, and NGO's. All to give us a better and more rapid understanding of the situation in said areas. Formal interviews would be interviews planned beforehand, often assisted by a recruitment agency and with the support of translator, transcriber and moderator.

Our research projects can have an agenda and an approach that can be any place on the scale from open and explorative to defined gathering of hard data for business development teams or concept developers.

The key objective of the open and explorative projects is in most cases to learn as much as possible within a defined research field. In the period from 2005 to 2008 we did a worldwide youth culture study, where we explored urban youth in all Telenor markets and a few non-markets with the intention to map out some general trends, consumption- and user patterns. The approach was highly explorative, yet we utilized a pre-defined questionnaire that was constantly developed, flexed and tweaked during the nearly 230 hour-long interviews we did in the project. The outcome was a highly detailed report that has been utilized in all Telenor markets as a tool to understand similarities and differences in youth culture and consumer trends across the borders.

Hard data projects rely on well-prepared interview guides that cover the key research issues in as clear and concise manner as possible to allow unambiguous interpretation, specifically aimed for the use of colleagues with other competences and roles than being professional strangers (Agar, M.(1996).). The key problem to such an approach is the limitations in both understanding and comprehension of local culture by the ones formulating the questions and the desktop hypothesizes. Formulating unambiguous questions with limited knowledge of local conditions ends up with answering one's own pre-conceived ideas about the specific issues wanted covered. In other words, the assumptions of the HQ team are answered and formalized in the questionnaire, and what were assumptions are now considered hard facts.

What comes through in most cases though is the need for a fundamental understanding of the social scenario that the social interaction takes place within. Lack of knowledge or understanding about the specific region, religion, culture or socio-economic class by those formulating the questions, gives an imprecise focus and data with great limitations in regards to information about site specific issues.

Herein lays the key objective of this article: to focus on the contextual knowledge we as ethnographers can provide to the team located in HQ, and how this knowledge in turn shapes the projects that we are involved with.

Our research method is heavily inspired of the psychologist Steinar Kvale and his interpretation/understanding of the interview as an "inter-view" – as in the knowledge that is established in the dialogue between the interviewer and the interviewee.

> ”The qualitative research interview has a unique potential for obtaining access to and describing the lived everyday world. The attempt to obtain unprejudiced descriptions entails a rehabilitation of the L*ebenswelt* -the life world - in relation to the world of science. The life world is the world as it is encountered in everyday life and given direct and immediate experience, independent of and prior to explanations." (Kvale 1996:54)

We can start from either the point of our structured information needs or our open research agenda. The structured point shares many assumptions with the world of corporate business and what is remarkable is those unplanned events where the assumptions do not match any reality we can discover and call for exploration to find meaningful patterns. On the other hand, the open research agenda allows structured findings to emerge from exploratory research as we discover patterns.

PRESENTING TWO DIFFERENT CASES

Our ethnographic case studies are positioned at the two extremes of the structured/explorative continuum. At the structured extreme ethnographers were required to provide specific answers to specific questions posed by business development teams focusing on the communication needs of the rural population in Malawi. At the other extreme an observer was sent to a remote location in Pakistan to explore local communication and information ecologies.

Both cases rely on the researcher's trained eye, receptivity to the unexpected and openness to the unseen and tacit. Because we are employed by a leading telecom operator, there are specific questions we need to answer within a limited time frame: the well structured questions are the easy ones to get answers to, but what about those dimensions of daily life that informants are less willing or simply incapable of communicating? Especially communicating in terms of the unexplored assumptions of European engineers or business developers? These are often the questions that are left unanswered or perhaps unasked, either because they violate local or universal norms of social etiquette or due to our or our informants' cultural blindness, making them all the more interesting. In our experience from various markets such questions and the responses they generate provide not only insight but may also suggest a variety of unexplored telecom service concepts. Through an explorative approach we have demonstrated an ability to formulate new research questions, hypotheses and gain new insight. This explorative approach provides the opportunity to generate future projects as well as knowledge that will be communicated as the contextualized information within the more limited framework of the current project.

Case 1: Malawi

During 2008 Telenor R&I initiated a project focusing on the providing low cost mobile telephony to areas where traditional approaches were considered to be unprofitable from a business perspective - in other words, the segment that is often referred to as BOP (Base/bottom of the pyramid). This is a segment, culture and social stratum that Telenor has limited experience of working towards, thus the need for knowledge and information was high. The firm's most important need was for structured formal data to plug into the business case. The case was built upon a design that entailed close cooperation with the service users, thus acting in accordance with the recommendations made by thinkers like C.K. Prahalad (Prahalad, C.K. (2005)) who discuss the business potential for the bottom of the pyramid. Prahalad emphasize the need for a deep understanding of the potential customers' living conditions, social networks, work patterns, annual patterns, transportation means and routes, religious practices, education, health, needs, wants and dreams, all within the limitations (time/cost) of a corporate paradigm. These are all the more problematic because they are unfamiliar to urban dwellers, business people, engineers and most who lack such life experiences. A project that relies on local support must first and foremost be based on local knowledge and understanding that is inaccessible to corporate headquarters.

Figure 1: Tea plantation in Malawi.
Contextual information and understanding is based on local knowledge and understanding. Harvest seasons and seasonal work affects the business case.

Developing a business case requires a number of data inputs that are needed to verify or disprove the solidity of the case. A detailed interview guide/data gathering guide was thus developed by the business developed team in close cooperation with the ethnographers staffed on the project. The goal was to map out all the needed factors that we where not able to cover during an extended desktop analysis. The guide was tweaked according to our feedback, but what we ended up with was still a highly detailed data collection tool that covered everything from average work commute to disposable income and harvest seasons. In other words: a questionnaire that could be shipped out to any data collecting agency and reported back to HQ a few weeks later. The problem is that the approach in this specific case is not based on the principles of a traditional business case. Approaching the BOP segment requires a fundamental understanding and connection with the local population, and during the weeklong fieldwork it became evident that the formalized questionnaire fulfilled some of the needs of the project team, but by far not all issues that needed to be covered. This is an insight we have from other projects as well, and thus the explorative angle/mindset paid off once again. Through active use of photos, informal interviews and observations we were able to sketch out a more complete picture of life in the Malawian countryside.

A large part of a hectic and highly concentrated fieldwork is being *in* the field. That means long days around the people and the daily life one is engaged in understanding. One illustrating case came upon us when visiting a small permanent roadside market on the road out of Blantyre. It's one of those markets where most everything is sold, and that have a formalized format. This is contrasted with the weekly or monthly markets found in more desolate areas of the countries. The function of these markets are twofold, products are bought from wholesalers located in one of the larger cities in Malawi and resold in smaller units to the local rural population, or the local population sells their products (diary, meat, vegetables, homemade products). Thus it's an important institution in the daily life of the average Malawian. What we found in these markets where that what could be considered small units of food or hardware, was split into even smaller units. This as an answer to an economic situation on household level that is highly subsistence based. No income is saved, thus creating a large fluctuation in the households spending power. This creates a need for – in other words a strategy – where small units are the solution. Cooking oil containers are split into daily rations that are sold for a fraction of the price of the whole bottle. This ensures that the end consumer can afford a product that would otherwise be out of the question if bought as a whole bottle.

Figure 2: Oil containers in the market.
In a limited monetary economy with a high degree of subsistence, alternative strategies have to be developed. These small oil containers are a good example of that.

This story created a much needed backdrop for explaining how household income are spent, how seasonal changes affect spending power, how innovative strategies are established when standard procedures or products are shaped to the environment it will be used. Through storytelling or context illustration we were able to explain to our business developers and engineers more about life in rural Malawi than any hard data collection could do. It became a way to explain the context of a rural Malawian family's daily life, and gave a deeper understanding of the environment our product would be used in. Through this we were able to shape the project in a direction where the offerings where more in tune with the local culture and consumption patterns. In this specific project it meant that we needed to develop call-units, top-up plans and top-up methods that where far smaller and far more economical than anywhere else we've been to date.

Case 2: The Northern Areas, Pakistan

During the past three years numerous Telenor research projects have addressed the lifestyles, behaviors and needs of the rural population in Asian growth markets such as Pakistan and Bangladesh. Recognizing the importance of understanding customers as well as the so-called "unconnected" (those without access to mobile handsets or living in areas with limited mobile coverage) in order to develop relevant and sustainable mobile service offerings, these initiatives provide useful insights and suggest a wide range of future service concepts. Without exception, however, they all suffer from the same shortcomings, limiting their scope and innovative potential, thereby also reducing their value to Telenor. Time constraints force the researcher to adopt an "attack and retreat" strategy in the field, covering as much territory as possible in a few days. Furthermore, the researcher/translator team needs time to fine tune their relationship in order to get accurate information – time that is usually not available. Adding to the inherent limitations of this approach, the research agenda and methods are rigidly pre-defined and offer little room for tweaking in the field or experimenting with alternative methods for data collection. Travel generally consumes over half of the allotted time for data collection. The "ideal" project has a relatively narrow focus (e.g. entertainment, youth, shared access, missed calls, SIM switching, distribution, etc.) that prevents or discourages the researcher form understanding the interrelatedness of themes and observed phenomena. Time constraints (among other factors) generally prevent the researcher from re-examining and questioning his/her preconceived notions about cultural context, development, poverty, the correct approach to business, the role of ICT in wealth creation, gender, religion, etc. – i.e. the cultural and personal baggage that is always brought along. Similarly, the social, cultural, historical and material contexts within which the observed phenomenon is imbedded are purposely neglected due to time constraints or because their relevance is not immediately apparent.

The net result of these factors is more often than not de-contextualized research carried out by teams under severe and unrealistic time constraints. A five-week field trip to the Northern Areas in Pakistan in 2008 sought to partially remedy this situation by remaining in one location for an extended period of time. Although it was recognized that this would not in itself remedy the shortcomings described above, it was anticipated that it would reduce the negative impacts of time constraints and allow the researcher to become a familiar face, gain at least a modicum of trust among the local population and "dig deeper" than had so far been possible. The initial focus for the field study was how information (broadly conceived) is generated, accessed, used and re-distributed within the community, e.g., what types of information, by whom, how frequently, at what cost, etc. Since Telenor is a mobile operator, it was also highly relevant to understand how (by which channels) inhabitants of these remote communities communicate, locally and to distant locations, with whom, for what purposes, how frequently and at what cost. Gaining a deeper understand of communication barriers (financial, literacy/skills, cultural, technical, etc.) was potentially also a significant outcome.

Figure 3: A farmer in a village in Northern Areas, Pakistan.
Mobile communications are rapidly transforming the lives of local inhabitants, presenting telecom researchers with new arenas and challenges.

Corporate market research departments generally resort to demographic analyses followed up by some form survey or focus group discussion to find answers to these and similar questions. To the extent that relevant background factors are known in advance they are included in questionnaires and interview guides, but the need to understand the contextual variables that frame and give meaning to the specific issues being addressed only becomes apparent in retrospect. Furthermore, this type of research is more often than not outsourced to market research firms that may lack the needed background to capture and understand the relevance of such findings. The final (PowerPoint) deliverable generally provides specific answers to questions that may serve as input to the business case and even suggest novel service concepts, but it seldom goes *beyond* the constraints imposed by the initial specification of research questions. The value (measured in corporate terms, naturally) of a more explorative and open-ended approach will be illustrated below.

Figure 1.2: Few women are seen on local streets in Skardu, Pakistan. Visitors are encouraged to respect local culture.

Although the initial fieldwork focus was on communication and information ecologies, it soon became apparent that even this comprehensive research focus that we initially thought could accommodate any foreseeable observation as well as secure relevance for Telenor proved to be far too limiting. Documenting the communication behavior and information needs of people in these remote communities would undoubtedly enhance our understanding of local consumers and perhaps even suggest new service offerings that would enrich their lives (and increase *our* revenue). It would also, however, raise countless new questions that can only be answered within the framework of the more inclusive cultural setting. Understanding the position of women in Shia Islam communities such as those that dominate this part of Pakistan, for example, illuminates some of the observations made. Women have limited mobility, even within the local community. They generally need to be accompanied by a male member of the family if they need to travel more than a few kilometers from their home or are exposed to environments where non-family men are present. For this reason female-only markets have been established in the local community. These markets are important information hubs for local women in addition to being one of the few available arenas for socializing outside of private homes. Since few local women own mobile phones, face-to-face communication is an important source of local news. Mobility restrictions also limit occupational opportunities for women, forcing them to turn down positions they are qualified for (e.g. teaching or health care). If women require medical attention, in particular obstetric and gynecological services, they must travel to the nearest female doctor. In the Northern Areas that means going to Islamabad by air or a one to two day journey by road. Being a male, the researcher had limited access to female respondents, but the husband of a local woman reported that his wife had used a Telenor Mobile Doctor telephone consulting service to get help from a female doctor in Islamabad, possibly saving her life and, as the respondent expressed it, *his* money. Based on even the most superficial understanding of the significance of gender within this cultural setting one can easily imagine a wide range of mobile services that would enhance the lives of women in the Northern Areas, ranging from banking and shopping to education, health, entertainment and information services. Documenting handset ownership, mobile penetration, usage patterns and average revenue per user (so-called ARPU – one of the traditional market indicators in the telecom industry) would undoubtedly appease business case developers back at corporate headquarters, but it would also leave many questions unanswered and opportunities unexplored. In our experience, returning home from fieldwork with such unanticipated and highly suggestive findings generates far greater excitement than merely delivering the needed numbers for an Excel spreadsheet.

CONCLUSION: MAKE BETTER DECISIONS THROUGH CONTEXT KNOWLEDGE

In this article we have present two recent studies from Malawi and Pakistan that illustrate how, on the one hand, ethnographically informed field studies can increase the likelihood of successful development of a business model, implementation of services and marketing of new telecom offerings, and on the other, how a deeper understanding of cultural context can help to establish a more sustainable and equitable relationship between the telecom operator and the community it serves.

Both cases demonstrate the importance of being on site, doing interviews and as much as possible experiencing life in the areas studied. Both cases also illustrate that the key outcome is something beyond the mere collection and compilation of hard data requested by team members at corporate headquarters.

Through domain-based knowledge specific to our industry and the possibilities that lay therein, experiences with similar scenarios from other markets or historical knowledge in the field of society and communication services we're in a position to deliver a more complex or "rich" description and understanding of the markets studied. This in turn means that better decisions can be made, risk can be lowered and local needs and wants can be met - in other words; "Taking Care of business" at the same time as we are "Taking care of Business".

Communicating findings from the type of research described above within a corporate business setting presents a unique set of challenges that cannot be addressed in this paper. In order to have an impact on service development, provisioning or corporate strategy, decision makers on the receiving end need to understand not only the rich aggregation of substantive findings delivered by the research team, but also to recognize their long and short-range implications for business development. The extended role of the corporate researcher in this crucial phase and the tools and techniques at his/her disposal need to be elaborated. This will be the subject of a future publication by the authors.

NOTES

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Pushing New Frontiers: Examining the Future of Paper and Electronic Documents

JENNIFER WATTS-PEROTTI
Xerox Innovation Group

MARY ANN SPRAGUE
Xerox Innovation Group

PATRICIA WALL
Xerox Innovation Group

CATHERINE MCCORKINDALE
Xerox Innovation Group

Rapid socio-technological change is underway in the world of work. The Xerox Future of Work team conducted ethnographic studies to explore the impact of these changes on the use of paper, printing, and electronic documents. Study findings revealed needs and requirements for workers of the future, and influenced the research directions Xerox is undertaking to explore how documents (both paper and electronic) play a role in the world of work. The team used several techniques to encourage innovation within the company, including the creation of an advisory board, a video podcast and a design directions document. By developing growth spaces that often require new business models and business innovation, the project is a strong example of how ethnographic studies can "take CARE of business." The project has also "taken care of BUSINESS" by lowering risk, driving innovation, and demonstrating the value that ethnographic studies can bring to the corporate world

INTRODUCTION

Rapid socio-technical change is underway in the world of work. Mobile technology and access to broadband internet have evolved enough that they now provide the opportunity to work anytime, from almost anywhere. Many companies are using these capabilities to send some of their employees home to work, effectively lowering real estate and commuting costs, and attracting a diverse set of workers. Workers are often members of globally distributed teams, who collaborate to create complex, interconnected webs of dynamic information. Video, audio, and databases of images are entering the world of work, along with Web 2.0 applications like wikis, podcasts, blogs, and social networking sites. The convergence of these trends is creating significant changes in the workplace.

The Xerox Future of Work team conducted studies in 2008 to explore the impact of these changes on the nature of work. Using an ethnographic approach, the team conducted interviews and observations of people who work at home or on the go. The people studied were already working at the forefront of these trends, participating in alternative work scenarios that didn't include office cubicles, and using new tools and technology to support these new kinds of work. The team studied how participants used technology to coordinate their work, how they balanced and/or integrated work and personal life, and how the nature of documents, printing, and paper was changing. Study findings revealed needs and requirements for workers of the future.

The Xerox Future of Work team has used the study results to support the corporation in looking beyond its traditional comfort zone of printing and document management. By developing growth spaces that often require new business models and business innovation, the project has been a strong example of how ethnographic studies can "take CARE of business."

To improve the impact of this study, the team used several techniques to facilitate dissemination and adoption of the findings, and point business users to their innovation potential. For example, we created high level concepts and scenarios to envision study implications. We then disseminated these scenarios and concepts through internal communication mechanisms, including a design directions document, brainstorming sessions with teams across Xerox, and a video podcast. These materials were multi-modal, including images, video, and audio, in order to reach the broadest possible audience throughout the company.

The Future of Work team also created an advisory board that included key stakeholders throughout the company. We use the word "stakeholder" as defined by dictionary.com as "a person or group that has an investment, share, or interest in something, as a business or industry." The stakeholders in our advisory board held a vested interest in the project because the findings held the potential to influence the direction of their own projects and organizations. Some stakeholders worked in Xerox business units, and others led changes in Xerox's internal work practices. Advisory board members accompanied researchers to the field, met quarterly to share progress with each other, and participated in brainstorming sessions. Interactions with the advisory board helped shape the research questions and pushed the stakeholders to move beyond traditional Xerox thinking.

This paper focuses on the study findings that describe how the role of paper, printing, and electronic documents are changing in the world of work. Additionally, the paper describes the techniques we used to drive change and innovation within the company.

BACKGROUND

We created the Future of Work project to explore the convergence of several socio-technological trends. One trend was that the number of remote and mobile workers has been increasing (World at Work, 2007). Many companies have been eliminating office space and allowing people to work at home. A 2006 report by Forrester noted that nearly all Jet Blue sales agents worked from home and that 42% of the 320,000 IBM employees worldwide did not have traditional offices. For the last twelve years Sun Microsystems employees have had the choice between working in a static office, working exclusively from home, or working in drop-in office spaces (Driver, 2006).

A second important trend was that mobile technology has evolved enough to allow people to work almost anytime, anywhere. Millions of people now work in coffee shops, restaurants, cars, airports, and parks, in addition to their homes (World at Work, 2007). To complement these new work scenarios, the worldwide shipment of smart phones has been exploding (McGrath, 2007). Smart phones allow users to access the internet from browsers on their phones, and have brought about an explosion in the number of applications written specifically for these phones (Anderson, 2009). For example, the iPhone is linked with an Apps Store that contains thousands of applications, ranging from games to business management support.

Of particular interest to Xerox was the question of how the use of documents, printing, and paper is changing. These questions were part of our focus in our ethnographic study of people participating in leading edge work styles.

PARTICIPANTS

We interviewed and observed a total of twenty-six participants. Twenty-four participants worked at home, and fifteen engaged in mobile work (work done outside a static office). Some participants fit into both categories – working at home for part of their time, and conducting mobile work during other parts of their time. The studies took place in three different cities: Rochester, NY, Grenoble, France, and Washington, DC.

METHODS

We used a combination of interviews, observations, diaries, and collages to gain a broad understanding of how work was changing. We conducted the interviews in locations where participants typically worked. They lasted approximately two hours and covered a variety of topics including where people did their work, how they coordinated and accomplished their work in various settings, how they managed information (or not), how they incorporated paper and printing into their work, and how they balanced work life and personal life. We audio and videotaped interviews, and subsequently transcribed them for analysis.

Participants prepared for the interviews by completing a diary for seven days. They added pictures of their work spaces and completed specific questions about their work practices. Completion of the diaries allowed participants to talk about aspects of their work life that they might not have thought about otherwise.

During the interviews, we complemented the conversation with a collaging technique that explored participants' ideas about their ideal work environment. Participants used stickers, markers, and any other media on hand to create two kinds of pictures: their current work environment and their ideal work environment. This technique sparked conversations about what was good and bad about participants' current work environments, as well as what they wished they could do to improve them. See Strappers and Sanders (2004) for more discussion about this kind of method.

SUMMARY OF KEY FINDINGS

While we were interested in the general changes in work practices, we were also specifically interested in how these changes would affect printing behaviors, and the use of paper. The findings summarized in this paper focus mainly on document usage and printing behaviors. See Watts-Perotti et al (submitted for publication) for a summary of other findings from the study.

FIGURE 1: ATTEMPTS TO MINIMIZE PAPER USAGE
While some participants did still use paper as part of their workflow, other participants tried hard to minimize its use.

While some of our participants still used paper as integral parts of their workflows, other participants invested considerable effort in minimizing their use of paper. Several participants claimed that they did everything digitally, including reading reports. If these participants happened to take notes on paper, or received paper from other people, they scanned that paper to archive it digitally on their computer. One participant had a ritual of regularly scanning handwritten notes into his computer. He took pride in the fact that he had very little paper in his office, and only had to carry a small binder to meetings.

Movement toward dynamic, nonlinear information structures

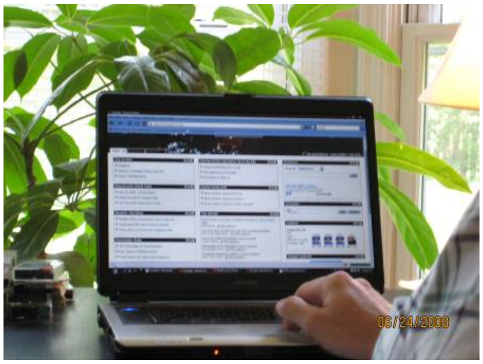

FIGURE 2:
Participants used information that was not part of traditional file-based documents

Participants struggled with current document formats and systems. It was hard to compare information at appropriate levels of granularity on an electronic screen. It was difficult and time consuming to transfer information across file or application borders. Cutting and pasting led to unexpected formatting changes that required large amounts of time to correct. Some participants gave up on the attempt to merge files electronically and instead resorted to printing disparate files that needed to be merged, and scanning them back into PDF in order to create a file that included all of their desired information. In general, participants found it difficult to isolate, chunk, move, and access the right information at the right time. To compensate for these difficulties, some participants were already using alternative tools like DITA (an XML-based tool that facilitates content reuse), wikis, and other information structures that make it easier to use and re-purpose smaller chunks of information more fluidly.

The transience of paper

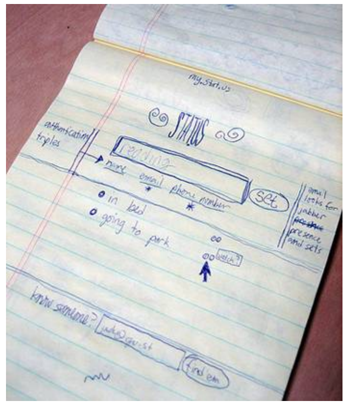

FIGURE 3:
Paper was used for transient purposes, like note-taking, and was usually discarded after use.

Sellen and Harper (2003) described several ways in which paper supports temporary tasks in various stages of knowledge work. Some of these tasks include planning, reviewing and marking up documents, making notes, and sharing information during face-to-face meetings. Our study supported these findings. Participants in our study used paper mostly for the same kinds of transient purposes. Most participants did not keep much of the paper they used. In fact, several participants were scanning paper to archive it so they did not have to deal with the huge piles of "cold files" that Sellen and Harper refer to as a significant problem.

Printing as a compensation for technology weakness

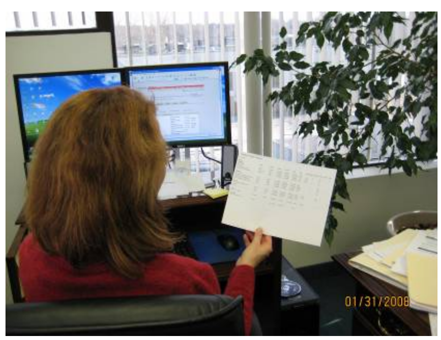

FIGURE 4:
Participants printed documents to edit them by hand, and then manually re-typed the edits into the electronic version of the documents.

Another way to look at paper's transient role is to see printing as a compensation for technology weakness. Participants in our study printed for the following reasons:

- To remind themselves of what they needed to work on (piles of paper on their desks helped participants remember what they needed to work on by functioning as visual to-do lists)
- To read on the go
- To make sure their documents printed the way they were supposed to print (ie: to make sure the layout and formatting were correct)
- To easily handwrite comments and corrections in documents like PowerPoint files (handwritten notes would then be manually re-entered into the electronic version of the document)
- To transfer signatures (a document would be printed, signed in handwriting, and then either scanned back into the computer, or sent directly to a recipient)

All of these reasons for printing are reactions to technology weaknesses. For example, people printed to remind themselves of what they needed to work on because things got lost in the vast network of information hidden behind the small screen on their computer. Participants said they printed documents that needed to be processed, or worked on, because they lost track of them when they disappeared into their computer. Mobile people printed to read in an effort to overcome screen size, power management, and portability problems in current electronic technology. They printed to edit documents because it was easier to write and draw comments on a paper version of a PowerPoint slide than it was to find the menu that allowed them to insert a comment, position the comment box, and type the comment.

It is important to note that when technology developers find a way to solve the problems that are causing people to print, printing will not be necessary to address those particular problems anymore. If technologists solve these problems quickly, printing could decline faster than we might predict.

DISCUSSION: TECHNIQUES FOR DRIVING INNOVATION

We found that it can be very difficult to explore evolving technologies because businesses are committed to their current practices. We therefore devised several techniques to help influence and open up thinking about new opportunities in such growth spaces. This section of the paper describes these techniques.

The advisory board: Garnering support within the company

One of the first things the team did was create an advisory board consisting of key stakeholders throughout the company. These stakeholders had a vested interest in the project because they needed the information produced by our project for their own work, and they did not have the resources to invest in their own studies. Some stakeholders worked in business units responsible for creating Xerox products, and others led changes in Xerox's internal work practices. The purpose of creating this board was to make connections, and build resonance with groups in the company who might benefit from the project.

Advisory board members provided input into the project research questions, tracked the project's progress through quarterly status meetings, shadowed researchers in the field, and participated in surveys and concept brainstorming sessions.

Functions of the advisory board. Since advisory board members had the opportunity to shape and contribute to the project, they felt a level of ownership and commitment to the project. A result of this commitment was that advisory board members opened doors within the company to attain more visibility for the project. They introduced the researchers to other key stakeholders in the company, and invited us to present the project to groups in the company that we would not have been aware of without having the connections from the board members.

Another function of the advisory board was to create resonance for the project within the company. In gaining exposure to questions and concerns from various stakeholders, we were able to not only answer their questions, but push them further than they might have expected, by challenging some of the assumptions that resided behind their questions. We were also able to tailor our findings and concepts in ways that piqued their interest, and drew them into the project, so they could hear not only the answers to their questions, but also gain exposure to other issues they might not have originally thought to ask about.

In addition to creating buy-in and resonance, we also gained opportunities to conduct internal research. For example, we discovered groups in Xerox who were working on solutions for future workers, and tracked their activities to learn more about their processes. We also conducted a survey of the advisory board to get their feedback on a set of concepts that were inspired by the fieldwork findings.

Another function of the advisory board was that it provided the opportunity for cross pollination and vicarious learning. The quarterly status meetings provided a chance for advisory board members to get to know each other and track other activities in the company that might be relevant to their own work. In fact, some of the liveliest discussions took place during round-robins at the end of each quarterly meeting, where advisory board members shared information about the work they were doing.

Benefits of the advisory board. The advisory board benefited both the members of the board and the project. One benefit for the project was that it facilitated new unanticipated synergies that we would not have discovered without the board. For example, during the year, one of the board members initiated a study exploring the possibility of placing a printer in a coffee shop. Given our interest in mobile printing, he invited us to collaborate with him on study planning and allowed us to conduct observations in the coffee shop during the study. This collaboration was mutually beneficial since he provided the framework for us to enhance our studies, and our observations enhanced his study results.

A benefit for the advisory board was that the project provided research into questions that board members were already interested in for "free." Board members needed to know the answers to the questions the project was exploring (to inform their own projects), but they did not have the resources to pursue the questions on their own. This is the main reason why so many people participated in the advisory board activities.

In addition to new synergies for our team, advisory board members also created new synergies with each other. Some of these synergies eventually led to the creation of a new cross-company team to facilitate collaboration across several of the groups whose members attended the advisory board meetings.

The advisory board also provided the opportunity for the project team to influence many levels of the corporation in parallel. Board membership was open to anyone who was interested, and included people at all levels of the company. Therefore, quarterly updates provided an efficient way of connecting with people at different levels within the company. Updates often led to invitations to present to other interested groups within the company. In fact, at the end of the year, we even presented directly to our CEO.

By staying attuned to various functions across the company through the advisory board meetings, we were ultimately able to focus the study and analysis in ways that resonated enough with the company to garner attention, while also creating evocative/provocative views of what is possible. This then allowed us the opportunity to create a bigger impact within the company.

Envisioning a response to study findings

The qualitative findings of ethnographic studies may not always help a company draw explicit implications. The future of work team attempted to make implications more evident by creating deliverables intended to provide a vision for how the company might respond to the study findings. For example, we created high level concepts and scenarios to envision study implications. Concepts were not specific recommendations for product ideas, but were instead high level concept templates that intentionally left room for viewers to fill in details that resonated with their business function.

Concepts and scenarios were communicated through a design directions document, which mapped study findings to concept ideas. The document summarized study findings, provided sketches and descriptions of the concepts, and discussed how the concepts could address the difficulties that we observed in the study.

FIGURE 5
Virtual collaborative team space: an example of a concept template developed as part of the Future of Work project deliverables

Figure 5 shows an example of one of the concepts developed as part of the Future of Work project deliverables. The basic concept template was a software or service that facilitated remote collaboration. While many systems like this already exist today, we found that our participants were still not able to make them work effectively to support their tasks. We used the concept template to frame the study results about the current problems experienced with remote team collaboration, and added details to the design directions document describing how a collaborative team space might be built to better support remote collaboration.

Making findings memorable

In addition to creating deliverables that attempted to clarify the implications of the study for the company, the Future of Work team also created a video podcast to summarize study results and introduce some of the concepts. The podcast was a ten minute stand-alone video that summarized key findings from the study, and included video clips from the field. The team used the video as part of the final project presentation, and provided access to it when people within the company asked for materials that summarized the study. We created this video with the hope that viewers would better remember study results after having experienced a multi-sensory representation of our findings.

Influencing corporate strategy

The Future of Work project was given strong support from management throughout the year. As the project developed, presentations were scheduled with increasingly higher ranked executives. As these executives were exposed to the project, they began to spread the word about the project to their colleagues, who then wanted to know more about the project. Each time we presented to an executive, the presentation was followed with discussions about what the future of paper and printing might look like. The project seemed to play an important role in helping these leaders break away from their focus on current business, become more aware of new trends like remote and mobile work, and begin to think about how the company might need to position itself in the face of rapid changes in the workplace.

One of the messages that seemed to challenge some basic business assumptions was the finding that the reasons participants were printing could be seen as compensation for technology weakness (as described above in our findings section). This was a different way to look at the transience of printed documents, and if true, this hypothesis means that technology developments could quickly lead to a rapid decline in the use of paper and printing – which is Xerox's core business.

The Future of Work team's presentations to these executives also stressed that in the face of such rapid change in the workplace, the company needed to explore alternative business models, and be prepared to respond if paper and printing actually do unexpectedly decline. By investing in the development of new business models, the company could drive more innovation, while at the same time lowering the risk of failure by developing alternative plans if the core business took a downturn.

As news about our project spread, we were eventually invited to present to the CEO and her Management Committee. In response to this presentation, several executives mentioned that they would use the information presented in upcoming strategy planning sessions. Ultimately, we discovered that Xerox was in the process of integrating some new components into the company's formal strategy. These components seem to have been inspired by the findings of the Future of Work project.

CONCLUSION

The Xerox Future of Work team conducted ethnographic studies to explore how work was being affected by the convergence of several socio-technological trends. Study findings have influenced the research directions Xerox has been undertaking to explore how documents (both paper and electronic) play a role in the world of work. The findings have also supported the process of evolving the corporate strategy to enable the company to be prepared to develop solutions and services that will support future work practices. For example, by pointing out that printing can be seen as a compensation for technology weakness, we encouraged the company to consider other possibilities for why paper plays a transient role in current workflows. By framing this transience as a compensation for technology weakness, the company has begun to watch for specific types of technology development that might be disruptive for paper and printing workflows. In fact, not only can we keep track of potential disruptions, we could even become the creators of these disruptions.

By creating evocative possibilities for how Xerox might evolve our current offerings, connecting these possibilities to the right people within the company, and communicating our study in ways that resonate within the company, the team has been able to drive innovation and contribute to the possibility of lowering risk within the company. The project gave rise to new research projects examining new business opportunities that were identified. The team has also begun to impact business strategy within the company. Therefore, not only has the project "taken CARE of business," by encouraging the re-framing of business models and objectives, the project has also "taken care of BUSINESS" by lowering risk, encouraging innovation, and demonstrating the value that ethnographic studies can bring to the corporate world. Since the studies are grounded in field-based data about the issues that people encounter in their work practices, the project is also "humanizing" business by creating opportunities for new business that will also improve the lives of workers as their work continues to evolve.

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How Consumers Create Value in a Recession Economy

TIMOTHY DE WAAL MALEFYT
BBDO/Parsons School of Design

This essay examines a conscious shift in the cultural flows of consumption practices. It explores the ways consumers are generating and sharing shopping competence as a new form of value. I argue that a shift in consumer consciousness and resulting open social discourse around shopping practices are creating a new consumption narrative in the recession. This narrative celebrates the resourceful and collective acts of people who transform modes of restriction (cutting back) into a positive social value of thrift. As people are practicing more thoughtful purchasing styles they are also more communicative with others in sharing their shopping strategies and ways of savings. Social changes are thus arising out of these adjustments in shopping behaviors. Such emergent shopping behaviors amplify a new sociability that demonstrates more appropriate ways to spend and save on commodities. This change shows that consumers are not just accepting new attitudes and behaviors towards shopping because they have to, but are doing so to be in tune with the spirit of the times.

Narratives of Shopping Experiences

The recent downturn in the US economy has brought into sharp relief the ways people discuss and plan out their shopping experiences. Before the recession, marketing messages flourished on trading up, from beauty products and clothes that celebrated glamorous lifestyles to luxury automobiles that depicted status symbols (Clifford and Elliot 2008). Marketers and advertisers promoted a consumption narrative that encouraged an emphasis on individualized brand enjoyment and personal fulfillment in store experience. Yet in the economic downturn, with the specter of financial gloom, consumers have quickly reduced their spending. Suddenly restricted spending and shopping is very much in vogue. Kurt Anderson of Time magazine describes this dramatic shift in our national thinking as a change from an "unfettered zeal for individual getting and spending to a rediscovery of the common good" (2009:3). A new narrative has arisen that promotes more careful and thoughtful use of money on things that matter more for people. How can we explain this rapid turn around in the cultural ethos of shopping? How are people reframing their shopping experiences to shape a new narrative?

This paper examines the shift in the cultural flows of consumption practices. Before the recession, shopping was about the enjoyment of immersing oneself in retail settings. People tended to become absorbed in the immediacy of retail exchange, buying on impulse, spending more and saving less, and largely allowing the shopping environment to influence their actions in purchase. Now that economic restriction has set in, there is a conscious shift to more pre-planning in shopping, using coupons, writing lists, organizing shopping excursions, buying less, and being more thoughtful in saving money as well as having more open discussions with others about the worth of things. These changes demonstrate more appropriate ways to spend and save on commodity items as consumers are also sharing these shopping competences with others in a new consumer consciousness. How, might we ask, did this occur?

I argue that, due to the recession, a shift in the consumer consciousness and changes in the social discourse on shopping have produced a new consumption narrative. This narrative celebrates the resourceful and collective acts of people who transform modes of restriction (cutting back) into positive social values of thrift. This change signals a different mode of consumption as it generates an alternative form of commodity valuation. Because people are practicing more thoughtful purchasing styles, they are also more communicative in sharing their shopping strategies and ways of savings with others. These emergent shopping competencies demonstrate more appropriate ways to spend and save on commodities as they amplify a new collective sociability. As such, social values perceived as frugality, scrimping, bartering and being thrifty, are recast as appropriate, even commendable competencies, and are evidenced in the stories people tell others of what and how they buy. This change shows that consumers are not just accepting new attitudes and behaviors towards shopping because they have to, but are doing so to be in tune with the spirit of the times.

Shopping for Value

In the fall of 2008 and spring of 2009, three separate ethnographic studies conducted by BBDO anthropologists sought to explore the particular meaning of economic value and the ways people adjusted their shopping practices in the downturn economy.[i] Interviews were conducted in six American markets: Atlanta, Detroit, Charlotte, New Jersey, Minneapolis, and San Francisco; and among 72 middle-income, ethnically diverse men and women aged 21 to 60 years old. We interviewed individuals, couples and families in their homes on purchasing habits, and shopped with them online and in retail settings. We discovered that while people are buying less and with more constraint, they are more thoughtful in how and what they buy, and discuss more openly with others what products mean to them. We sought to explain this perceived rise in thrifty and thoughtful consumption practices that circulated among people.

Pre-recession Narratives of Shopping

Shopping describes a very modern experience in American culture (Zukin 2004). Narratives about shopping are ways of communicating and reifying this experience to self and others. By narrative I mean that our shopping experiences help structure our thoughts, feelings, actions and consequence into a frame by which we interpret the present (Bruner 1986:142). Narratives not only make meaning out of what we do, but also provide a "science of the imagination" (Bruner 1986:141). They guide us as both "living through" and "thinking back" to make sense of what we do, as well as "wishing forward" to establish goals and models for future experience (Turner 1982:18). The former narrative of shopping for personal fulfillment and instant gratification has shifted to one of more thoughtful ways to buy things through delayed gratification. What's curious is how the former narrative of in-store shopping enjoyment has changed to at-home thriftiness so quickly and profoundly since onset of the economic recession.

Shopping developed as a modern form of self-gratification. With the arrival of the self-service format in the 20th century, shopping greatly accelerated as a source of personal aspiration and leisure. Consumers had direct access to goods with no mediation between them. This merged the chore of "doing" shopping with the idea of unlimited choice and fun of "going" shopping (Bowlby 2001: 31-32). The narrative of indulgence in shopping reached a peak with the apotheosis of the brand in the late 1980s (Malefyt 2009:202). Stores from Disney to Niketown were staged as immersive brand experiences that engaged shoppers on a personal, sensory and emotional level (Malefyt 2006, 2007; Pine and Gilmore 1998). Sensory anthropologist, David Howes remarks: "This sea-change in the sensual logic of capitalism is what lies behind the transformation in 'values' whereby work discipline, thrift and moderation have been replaced by self-fulfillment, impulse buying and conspicuous consumption" (Howes 2005:290). The emphasis on unlimited choice and impulse buying shaped the online format as well. Sites like Amazon anticipate our needs by depicting products similar to the item viewed and by ranking reviews of customers to further pique our interest. These additional features, writes consumer sociologist Sharon Zukin, emulate the "back and forth" considerations that people experience in stores, so that online shopping reflects our thinking and feeling in a store that never closes. "When we can shop anytime and anywhere, we wind up shopping more" (Zukin 2004:238).

But with the downturn economy, the narrative of carefree spending while shopping has been replaced by one of more thoughtful planning before shopping. As with any change in narratives, new facts emerge that contradict the credibility of the old narrative. A recession has drastically altered the contexts and social discourses of shopping. Edward Bruner notes that, "New stories arise when there is a new reality to be explained, when the social arrangements are so different that the old narrative no longer seems adequate" (Bruner 1986:151-2).

A New Narrative: Resourcefulness and Negotiation as Generative of Meaning

As consumers shift from spending to saving, the narrative of impulsive purchases and instant gratification is replaced by more thoughtful planning in thrifty acts. Consumers are showing more resourcefulness at home with family and friends outside of sites of consumption, rather than seeking stores as sites in which to express free choice and define the self. Restrictive shopping practices previously considered unacceptable are now reframed as acceptable, even smart. Daniel Miller (1998) describes this difference of planned-out shopping against the impulses of individualized expenditures in his concepts of thrift and treat. Thrift is money deferred of immediate gratification (the individualized treat) in place of more thoughtful spending for a generalized other. He states that the concept of thrift "is instrumental in creating a general sense that there is some more important goal than immediate gratification, of some transcendent force or future purpose that justifies the present deferment" (Miller 1998:104). Thrift is central to our argument here in how money deferred of immediate gratification is used for the greater household good. In our research we found that restricted shopping and careful spending on things is transformed from a negative concept of reduced personal satisfaction to a sense of joy in shopping for the common good of self and others. Yet, different from Miller, the act of shopping as delayed gratification is not about some vague transcendent force or generalized sacrifice. Rather, we found shopping to be directed towards specific others within familial and social networks. People are shopping intentionally and thoughtfully for the good of self and others.

Resourcefulness for the Greater Good

In our studies, consumers spoke of "being smarter with their money" by planning out purchases ahead of time, using coupons, making lists and organizing shopping trips. These are the means of reifying the importance of personal relations and showing care for others through modified and structured shopping practices. Viviana Zelizer writes in The Social Meaning of Money how people are constantly creating, classifying, and organizing different kinds of money to cope with and enhance their multiple social relations (Zelizer 1997:1). Discovering resourceful ways to save money shows an extended sense of pride and care for one's family and significant others.

Don, a 55-year-old African American computer programmer in Atlanta, was on an upward track with a software company until layoffs last fall. He has taken a new position in a firm, but at a much lower pay scale. He describes this economic change as altering his attitude towards spending as well as reprioritizing his values:

> *I used to go out to lunch everyday. I now have no predisposition to bringing my own food to work in a bagged lunch. I hated how it looked to other people. It is sort of a pride thing for a Black person. I wouldn't buy Costco water either, only Desani. I just wanted to be like other guys. It used to mess with my head. But now, in reality, who cares! I will gladly take a bag lunch to work for a week if I can take my grandson to Target and buy him an Elmo doll. It means much more to me now.*

Don not only rejects his previous bias against appearing stingy in bringing a bagged lunch and off-brand water to work, but has decided that whatever modicum of indignity he feels is incomparable to the joy he receives for spending on his grandson.

In another interview, Donna, a 38-year-old married woman of Italian descent with two small children in a modest New Jersey suburban home, affirms that her new mode of restricted shopping has led her to reprioritize what is important in her life.

> *Before, if my husband or I wanted something we used to just go out and get it. I'd say, 'I'm going shopping,' not with a purpose in mind, but just to go shopping. We used to act on our wants, go get it, and think nothing of it (points to the purchase of a large screen TV). Now, we really discuss necessities. We focus on what we need, not those immediate gratification things I did in the past. If I don't have a need or a purpose to shop, I don't go.*
>
> *I've learned to watch my money more. It's positive to watch how I spend my money, to plan it out if I really need or don't need something. So now we think about it and spend on what's really important, like for my children, for their education. It's helped me to be more cautious.*

In another example, Missy, a single mother on limited income in Detroit discusses the heightened meaning of spending money on things for her son rather than herself. In fact, she re-allocates her personal "frivolous" money into expenditures for her son.

> *It's easy for me to say 'no' to myself, but it's really hard for me to say 'no' to him. I spend more money on Jack (her son). Jack gets all the frivolous money, which is fine. When he gets school pictures, we just buy the biggest package, because I love giving pictures of my kid to people. It's stuff that you don't need as much, like toys. Grown up toys are things like iPods, CDs and DVDs. I don't need that stuff. That's entertainment dollars. But I will spend that money on Jack.*

The restricted use of money, here, not only informs a refocus on expenditures for significant others over self indulgent purposes, but also indicates a different consumption experience that alters the meaning of things bought. Missy sacrifices spending "frivolous" money on herself for photographs of her son that she deems more meaningful. She demonstrates a different use of restricted money and holds a deeper value for things bought with that money, transforming what otherwise would be money spent on temporal and non-lasting value (entertainment) for something she considers more memorable and meaningful (photographs of her son).

For Crystal, a single mother of two children in Minneapolis, showing resourcefulness means renting movies from the library instead of the video store since they are free, using Bounce dryer sheets twice instead of once, buying generic paper towels, using water pitchers and filters instead of buying cases of water. She, too, has taken a pay cut to remain employed. But rather than feeling bitter about it, she claims that money restrictions have made her more thoughtful about her life.

> *I try to keep a positive outlook and plan on a shorter-term basis. My family becomes a focus and priority. My money outlook has changed in the past year. You always think about these things,*

but recently I stepped back to appreciate things going forward, making the right decisions, and being aware of our health.

The idea of spending more thoughtfully on self, family and others is also shared in groups as social currency. Again, Donna, the New Jersey mother of two, relates her experience of joining a mothers' group to informally discuss their situations, commiserate with others, and share helpful ideas on coping with limited money. She claims to have learned resourceful ways, not only to save money, but also that bring her closer to her husband:

I recently joined a mothers' group. There are a variety of moms, some who just lost their jobs. We meet and talk about all sorts of things, like not going shopping as much and not going out to dinner like we used to. It gets depressing to stay home all the time. One woman discussed an idea about having that feeling that you've gone out to dinner, to get away for a while. You wait till the kids go to bed. Then you and your husband cook something totally new. You put out wine. Make it more of a date night. It's fun and exciting because you are cooking and eating together. That's one way my moms' group gives me ideas to do something to make my doldrum life feel different. But it's not having to spend money to do it–and you feel better.

These examples reveal how money earmarked for saving and spent for others is more highly valued than spending on individual pursuits. This suggests that money earmarked for saving assumes a socialized quality for a greater good. Saving money through thrifty acts not only downplays impulsive shopping and individualized acts of consumption, but also generates a new respect and source of pride in thoughtful shopping for others.

Sharing the "The Deal" in Hard Times

Another dimension of resourcefulness in saving money is found in the stories people tell that celebrate "the deal." Saving money lives as a narrative for sharing with others. Getting a deal may be a completed act, but the retelling of it activates a discursive process that can be retold over time. People express pride and satisfaction in retelling stories of saving money to others. For some the story evokes a sense of competence and skill of self-ability; for others it shows they are smart and thrifty shoppers for their families. Saving money then becomes a self-expressive tool that enables better storytelling around consumption than other shopping behaviors. Stories of how one shops and the way one acquires items become lessons learned that are passed on to others.

Getting a deal makes me want to tell others. Like the time I got a $100 Donna Karan purse for $29. I kept watching it at Marshall's, and hung it at the back of the rack, and waited until it came down. I kept returning and putting it in the back, and one day they reduced the price.

As anthropologist Melissa Fisher found in one study for BBDO, people are especially proud of the amount saved when finding and buying an item for less, so that the item purchased becomes secondary to the actual savings. This means personal value is linked to people's ability to save on a given item or set of items because it manifests values of being a smart, savvy shopper. Sociologist Sharon Zukin explains, "Shopping is not only–nor primarily–an activity of acquiring goods: it is a social encounter, a research operation, and both a moral and an aesthetic experience of acquiring values" (Zukin 2004:61). The importance of telling the deal, of money saved, is especially amplified in stressful times. The depressed economy means that the deal you got gives back, not only as money saved, but of a better sense of self. The sense of getting something back counts for more, since money spent is transformed into feelings of something gained for self or for others. Daniel Miller (1998:68) calls this transformation a "totalizing ritual," where the act of expenditure in shopping is transformed into a feeling of saving that works toward some greater good. Importantly, this discourse reframes former notions of "stinginess" into a joy of competence, since "getting something back" shows a resourceful strategy for living in hard times.

For American consumers, getting a deal shows pride, skill, smartness and other values that contradict the free flow of money. Still, open discussions among couples and families around money and shopping are a frequent source of debate over what constitutes "real" needs. Donna, again, relates this tension in buying a particular brand for her husband:

> *There are lots of discussions and sometimes quarrels over what we really need. My husband insists on Dove soap, even though I find that the store brand is just as good. But I get it for him because he gets upset if I don't.*

Various ways to save money evoke discussions on household expenditures and brings into circulation personal differences in ideology and values. Zelizer writes that money earmarked for different household uses, whether for food, rent, school, or other funds is often contested. "Conflicts emerged over arrangements, as family members struggle over how to define, allocate, and regulate their monies" (Zelizer 1997: 202). As I detail below, this source of tension over money and spending is resolved in the ways shopping is redefined for the greater good.

Discussion

In a downturn economy, this paper has shown that ways of spending and saving money carry heightened meaning and social value for people that are subjectively experienced and produced. Zelizer (1997) in her discussion on the social meaning of money claims that money is not simply a flat, colorless and disinterested form of commodity exchange. Rather, money earmarked for family purposes and personal uses, such as for pin money, utility bills, charity, "mad" money and so forth, becomes loaded with personal meaning and values. Emotional value is attributed to money depending on the perceived worth and planned interactions of the social relations it signifies.

What is interesting is when we examine the emotional meaning of money at work in the recession. Spending carefully and thoughtfully in a restricted economy has come to signal the positive values of community. Restricted money and emergent shopping competencies that demonstrate thrift are used to imagine and shape close human networks such as families, couples and friends. Values of thoughtfulness and concern for other are expressed through various acts of saving and spending, and signify what a social group, such as being a family or having friends, means to people. These ideologies and practices of thrift and resourcefulness around money help define and enhance human relations through sharing competencies as well as offering practical resources for living in a downturn economy. In this way, the issue of dealing with reduced money – a reality for many people today – is transformed from a negative value of "being without," into a positive virtue of "working together." As such, styles of shopping and saving have come to embody socialized values (see also Bowlby 2001; Miller 1997, 1998; Zukin 2004). Shopping for pleasure and for immediate gratification is now considered distasteful because it is deemed too individualistic and self-centered. Whereas thoughtful planning and delayed gratification of purchases is considered more appropriate, since it is seen to work for a common good. We might ask how restricted spending has come to signal virtues of collective identity.

Restricted Money and Boundaries of Community in Action

The notion of creating community through "buying for others" in shopping is a cultural construct that was frequently referenced by people in our studies. Shopping and spending practices are one way that identity is expressed and affirmed (Bowlby 2001; Miller 1998; Zukin 2004). For Americans, notions of collective and individual identity strongly co-exist, often switching from one pole to the other, as Alexis de Tocqueville (2002) first noted over 150 years ago. It appears that after a recent spate of extreme individualism exemplified by hyper-consumption, there is now a return to more restrained spending that coincides with an aspired shift towards collective identity. This is witnessed in the rise of more thoughtful and resourceful shopping and spending practices on self and others. Communities are imagined, Benedict Anderson notes, not by their purported falsity or genuineness, but by the style in which they are imagined (Anderson 1983:6). Today, thoughtful and thrifty shopping styles indicate a desire for community.

Ideas of community, nevertheless, oscillate between an imagined ideal and pragmatic reality, with conflicts to sort out (Anderson 1983, Cohen 1985). Miller et al. (1998) revealed this tension in their example of shopping mall destinations. People may hate shopping as an actual family unit, yet are drawn to places and stores that are devoted to family shopping (1998:17). The economic downturn today reveals this tension between ideal and reality by a change in attitudes of what shopping means and the ways people shop and spend money. It enacts a tension between community values and individual desires within a framework of restricted limits.

As I have argued, in a downturn economy thoughtful spending for a collective good assumes positive communal values, while spending impulsively on individual pursuits is viewed in negative self-serving terms. Lave shows this similar struggle between individual and collective identity in her study of American families and money management. Lave found that a paycheck inextricably belongs to the family member who earned it. Yet once money is associated with family, it must be transformed into collective property, since money within the family is generally assumed to express and create solidarity for the collective good (Lave 1988:134). People in her study resorted to various strategies such as splitting family money for paying collective expenses like rent, utility bills and so forth, while keeping individual checking accounts and "mad money" for personal splurges. In another example, Mary Douglas, in her study of economic systems of exchange (Douglas 1967) associates the flow of unrestricted money with individual endeavors, and restricted money with collective values: "As I see it, money in its nature is essentially an instrument of freedom… Money starts as a set of open possibilities of acquisition…It is in the nature of money to flow freely, to be like water, to permeate. But by their nature coupons [restricted money] represent closed doors, rational order, for they express society's overriding purposes which curb the drive of individuals" (Douglas 1967:126-7). This distinction between money flowing freely for individualized purposes and restricted money rationalized for collective purposes, indicates two different monetary values that highlight collective versus individual dynamics of spending and saving today. Money management and spending practices not only reflect conflicts between individual and collective interests, but the economic recession has put increased pressure on individuals to spend more on collective purchases over their own personal desires. Individualized spending in the recession has come to stand for selfish desires against spending for a common good.

In this sense, restricted money has come to represent a new boundary marker that identifies community and its aspirational values. In The Symbolic Construction of Community (1985), Anthony Cohen shows how boundaries help define the group because boundaries are a source for social interaction. Boundaries are where the idea and practice of community is defined. In our ethnographic studies, notions of restricted money quickly became a source for interaction and contestation within families, as well as a source for discussion, asking advice, and demonstrating pride, among friends, social groups and local affiliates: "The consciousness of community is encapsulated in perceptions of its boundaries; boundaries which are themselves constituted by people in interaction (Cohen 1985:13). Restricted money and thoughtful spending thus is shown to be a source for generating communal narratives and competencies through evoked discourses, displays, and practices among various networks of people. Moreover, its material markers, such as shopping lists, coupons, flyers and sale items, represent the tangible and "moral" guideposts that hold people to those values while shopping. In this way, the social actions such as thrift shopping and hunting for bargains, and using the physical markers of shopping lists, coupons and sale pamphlets, reify the positive values of community and of working towards a collective whole. These actions importantly help transform what previously was perceived as restricting one's freedom and choice as an individual, into guided collective efforts that work for a greater good. Thus, money earmarked for saving and spent thoughtfully on families and friends in a recession has the effect of arraying the socialized, even moral components of the group, modifying acts of consumption for purposes and in ways that are perceived as ethically responsible for a greater good.

Restricted money and the narratives of shoppers reified in consumption then evidence a framework for a new social consciousness – one that represents money that is thought about, planned and discussed among others for a perceived greater good. Consumer competencies that demonstrate resourceful and clever use of restricted money live on in the social interactions with others as well as in the stories they tell of "getting a deal." Such practices evidence boundary-work in action as they also highlight socialized skills in working towards purposeful ends.

Conclusion

The shift in narrative, from in-store impulse to at-home sociability has shown not only to redefine what shopping means today, but perhaps reveals an emergent cultural ethos and new practice of consumption – one that illuminates one's skills, cleverness and forethought in signifying the greater value of people, relative to the things we buy. Generating new shopping and saving practices that centralize the resourceful self and communal others in pre and post-consumption might also re-shape the meaning of aspirations. Competencies of demonstrating consumer resourcefulness, shopping skills, and buying for others may reflect a new consumerism that prioritizes the communal self over individualistic ways, and importantly helps create and sustain supportive relations in difficult times. Perhaps, too, this framework only functions within the constraints of the current economic recession, and upon lifting such restriction, spending will once again return to individualistic self-centered pursuits. Yet for now, we can approach an understanding of how spending wisely and saving money are shared competencies that promote a feeling of community-in-action. Restricted money and careful spending, rather than discouraging people not to enjoy shopping, appears to bring together feelings of community, joy and of shopping that work towards a greater good.

NOTES

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Lead type, dead type: New patterns of local news production and consumption

ELIZABETH F. CHURCHILL
Yahoo! Research

JEFF UBOIS
The Bassetti Foundation

Newspapers are in trouble. Steep declines in circulation and advertising revenue have forced outright closures, reductions in force, cessation of print in favor of web only editions and frantic searches for additional sources of revenue and audience. In this paper, we report results from an interview study focused on everyday news consumption practices. Our study indicates there are many design opportunities for local news creation and distribution at interface/interaction, infrastructure and strategy levels.

"The modern newspaper is a magical institution like the rainmaker. It is written to release feelings and to keep us in a state of perpetual emotion. It is not intended to provide rational schemes or patterns for digesting the news..." -- Marshall McLuhan

INTRODUCTION

There is much in the news of late about the demise of newspapers. Steep declines in circulation and advertising revenue have forced outright closures, reductions in force, cessation of print in favor of web only editions, and frantic searches for new sources of revenue and audience. Print versions of nationally known papers, including the Christian Science Monitor, Seattle Times and Rocky Mountain News have ceased production, and there are fears for papers such as San Francisco Chronicle and the Boston Globe. Speaking in 2008, Microsoft CEO Steve Ballmer asserted "there will be no media consumption left in 10 years that is not delivered over an IP network. There will be no newspapers, no magazines that are delivered in paper form…" (Whorisky, 2009; see also Schiffman, 2009).

To set some context, 2008 was one of the worst years ever for U.S. newspapers; total print and online advertising revenues dropped 16.6 percent to $37.8 billion from $45.4 billion in 2007 (National Newspaper Association, 2009; see also Mutter, 2008). Wall Street's evaluation of the news business is reflected in the 80-plus percent decline in the market capitalization of newspaper major chains, and based on decreases in print ad revenues since 2006 (Chi, 2009; Potts, 2009; National Newspaper Association, 2009). Investor Warren Buffett, a major shareholder in the Washington Post, recently stated that "For most newspapers in the United States, we would not buy them at any price…They have the possibility of going to just unending losses." (Patterson, 2009). The Papercuts website notes the closure of dozens of newspapers, and loss of nearly 16,000 newspaper jobs in 2008, and over 9000 in the first five months of 2009 in the U.S. (Papercuts, 2009). Closures are not limited to North America; in 2009 the UK's Guardian newspaper reported "a net loss of 42 titles" (Greenslade, 2009).

Social and economic theories abound about why newspapers are folding (Nichols and McChesney, 2009; Zuckerman, 2009), often coupled with predictions about what may happen in the future (e.g., Johnson, 2009). Certainly, analysts cite the loss of the quasi-monopoly status the newspapers held until the advent of Internet and other information dissemination infrastructures (Kurtz, 2009). Others draw correspondences between the move from print to digital and earlier forms of technological revolution and resistance to change (Shirky, 2009). Though the world of news is no longer ink on paper, there is a deeper fear that both journalism and national and local civic engagement are at stake (Haven, 2009; Schulhofer-Wohl and Garrido, 2007). Indeed, Starr suggests the newspaper as the authoritative news source in a democratic society may have had its moment (Starr, 2004). However, information has the same, if not more value, than ever. An ethnographic, "deep dive" study conducted on behalf of the Associated Press in 2008 addressed news reading consumption practices amongst 18 people in six cities located in the US, UK and India. The study suggests consumption of news has moved to other contexts, like listening to the radio while driving to work, watching TV news in the evening, or checking headlines from work computers or through email alerts from friends or from services (Associated Press, 2008).

Local newspapers present a special case of news reporting. Their audience is geographically defined, and so too are their editorial concerns. To the extent they produce their own editorial content, their information is exclusive, unlike larger papers, which often reprint syndicated material. Jonathan Knee, an investment banker and director of the media program at the Columbia Business School told Wall Street Journal blogger Heidi Moore in March, 2009 that "The most profitable [local] newspapers have tended to be monopoly markets with circulation of 20,000 to 100,000 readers....they could charge as much as they wanted for those little classified advertisements without investing anything in marketing, and even frequently getting them wrong without much fear of consequence" (Moore, 2009). However, BIA/Kelsey estimated that U.S. local advertising revenues would "decline from $155.3 billion in 2008 to $144.4 billion in 2013, representing a negative 1.4 percent compound annual growth rate (CAGR)". The decline is unevenly distributed; while papers like the Berkeley Daily Planet are in deep financial trouble, others such as the Albany Times Union in New York remain profitable. Readers seem relatively unconcerned about the disappearance of the local newspapers; a Pew Research report in March 2009 stated that only 33% of people say they would personally miss reading the local newspaper a lot if it were no longer available (Pew Research Center for People & the Press, 2009).

Studying Local News Consumption

Curious about people's attitudes to local news and about the different ways in which local news is consumed other than through print, we undertook a field-based interview study to understand more deeply what contemporary forms of content and practices around consumption of that content are emerging. We were specifically interested in technical and strategic potential for transforming – encouraging – local news readership and participation in the production of news.

Our study was situated in the San Francisco Bay Area, at the heart of Silicon Valley, home to many large and small Internet companies. The San Francisco Bay Area covers the wine country of Napa Valley in the North to Silicon Valley and San Jose in the South. According to the government's Bay Area census, the Bay Area has a population of over 6.7 million people in nine counties and 101 cities (Bay Area Census, 1970-2007).

As a preliminary to our interview study, we compiled a list of all the local newspapers in the broader Bay Area, and analysed a week's worth of three local newspapers (San Francisco Chronicle, San Jose Mercury News and Berkeley Daily Planet, which had recently moved to a much less frequent publication schedule) and examples of local free print publications (e.g., Noe Valley Voice and the Bay Area Guardian). From these analyses we derived a sense of the rhythm of publication for local news, its distribution and coverage, and regular content types, which we divided into: advertising; entertainment ("funnies", crosswords, puzzles, etc); events; reviews; advice (recipes, agony columns, horoscopes); and news which we further subdivided into immediate and ephemeral (breaking news items), serial engagement (ongoing serialized content), in-depth stories (investigative journalism) and reflective/analytic frameworks (typically editorial and column content). From these analyses, we derived an interview protocol of open and closed questions, and produced a numbers of interview probes that were shared and discussed in interview.

We carried out semi-structured interviews with 24 Bay Area residents. We selected interview participants using a snowball method, beginning with an email sent to local distribution lists. Interviewees were pre-screened to ensure they had lived in the Bay Area for at least a year and considered themselves to be somewhat active in their local neighborhood where we described 'active' to be anything from eating in local restaurants to engaged in local activism. We did not select for gender, but we did select interviewees in order to cover a broad age range (20's-60's) and selected for a range of educational backgrounds and self described career/job interests. Our interviewees were all Caucasian and culturally American, although two moved to America in adulthood. Only four of our interviewees were brought up in the Bay Area. All were educated to at least high school graduate; all but two had degrees and/or higher degrees. Four of our interviewees had children of school age at home. Our sample included early adopters (including developers) of Internet technologies and late adopters or "laggards". All of our interviewees use the Internet regularly (daily), and all but one had access to computers at home. All but one of our interviewees own a cell phone, although only 8 of those that had cell phones had 'smart' phones such as iPhones and Blackberries.

We met people at their homes, or in local meeting places such as cafes. We invited people to bring regularly used internet-enabled personal devices and asked them to show us their regular reading sources, including bookmarks and folders of saved items, if any. Our field interviews were conversational; our interview protocol semi-structured. All interviews were audio and/or video recorded. We asked all interviewees what they considered to be areas they "kept track of", showing them a map of the local area, and which local newspapers they were aware of. We asked people about news reading in general, about local news and about their sharing practices. Regarding content, we followed our framework outlined above, discussing feature stories, investigative stories, event listings, police "blotters", horoscopes, recipes, cartoons, weather, finance results, puzzles and crosswords, reviews for restaurants and shows, classified advertisements, letters to the editor, advertisements and coupons and event listings. We asked what aspects of local news would be of value, and about other sources of news – radio, TV, online news sites and news aggregators, Internet search, social networking sites, email, etc. We asked more general questions about social activities in local neighborhoods, and about their general level of social activity, online and offline.

In addition to our interviews with newsreaders, we conducted interviews with two local journalists, two bloggers who write local news, and with two local news blog sites. We attended a local panel featuring prominent journalists addressing the demise of the local news industry. Finally, we conducted a focus group with 5 friends aged between 42 and 55.

Findings

Although we focused much of our questioning on local news consumption, our study revealed a number of issues that pertain to news reading in general, that is to news that could be described on a continuum from hyper-local to local to regional, to statewide, to national, to international and global. We will first present some observations of news reading routines, and then address two critical issues in more detail: the disconnect between producers' and consumers' notions of 'local', and negative perceptions of quality/credibility.

Newsreading in practice (when and where people read the news)

The rise of Internet news sites and weblogging, and the easy availability of mobile devices that enable microblogging with text and rich media mean that more and more information is readily available. Where once there were sanctioned and carefully edited print editions set to a hourly, weekly, monthly or event related schedule with usually fairly limited distribution channels, now there is a constant stream of broadly distributed, editable, commentable and forwardable news. That said, people still establish daily rhythms and places associated with news reading.

> First thing I do every morning is I grab my iPhone and I look up the news, the AP news application. I have occasionally used the Yahoo app – they do a good job with news. This is just to get the quick 3 or 4 minute overview of what is going on. Then about an hour and a half later when I get to the office, I go to CNN and see what is going on. And maybe spend another 5 to 10 minutes there, and that is about it for the morning for me. *EC, male, 30's, newsreader*

> My husband reads me the headlines in the morning. Just tells me the important things. Then I take a look online at lunchtime at work. And I may check in on TV in the evening. *BB, female, 30's, newsreader and blogger*

News reading is also a part of the commuting experience. Unlike those who commute by car, passengers on public transit systems tend to engage more with print.

> When I commute I have to be up to a certain page by a certain stop and time it perfectly so I'll be on the last page when I get to my stop. And then I'll leave it there for someone else to read. That makes me feel good, I like to leave newspapers for someone else. *EI, male, 50's, newsreader and art columnist*

Most of our interviewees rely on a variety of sources for information, including libraries, public notice boards, and radio. People understand which forms are better for what kinds of things, and actively collage different channels as they "snack" on news through the day.

> I take breaks all day and check the news…I am online pretty much all day. So I usually take little breaks all day and check the news. I usually check SFGate and if I am feeling lazy I will check Google news and scan the headlines. *TT, female, 20's, newsreader*

Several interviewees offered comparisons between local papers and other sources like Twitter, and showed a sophisticated understanding of the parameters within which each holds value for them—and possible threats to that value such as non-content like 'spam'.

> Twitter has become the first place that news breaks. Retweeting has become big. And it is also the way to proactively get news when I am somewhere new. It helps that there is very little spam. If there is ever spam it will ruin it. *TC, male, 40's, newsreader and blogger*

When considering technologies many people considered form-factor, including the materiality of the newspaper. Reading the newspaper rather than news online is associated with convenience, as in the commuting example above. However, the physical newspaper apparently holds readers' attention in a fundamentally different way and people report an aesthetic dimension to reading a physical newspaper.

> There is something very satisfying about reading something on paper. It is much easier on the eyes and on the senses. Reading a newspaper is not like the tunnel vision of reading online. You can't flip through the pages, you can't flip through and go back and forth – well I guess you can but it doesn't feel the same, it's laborious. *TT, female, 20's, newsreader*

> I can't read lots of long articles online, there's distractions–there are ads and you can click a million buttons and go anywhere you want-the minute you lose focus you can click away and then what you were reading is gone and it is hard to make yourself some back. But when you are reading the paper, if you skip around, you idle for a minute and then you just come back to what you were reading. And I hate the scrolling. *BM, female, 30's, newsreader*

Collocated sharing and the 'keepsake' potential of paper were other qualities readers invoked in their desire to retain paper forms in the ecosystem of news dissemination. Paper remains unsurpassed by digital sharing practices such as forwarding stories or posting stories on social networking sites and services like Twitter and Facebook.

> If there is not a space to invade you don't. If I had seen my father reading his iPhone, there would have been no invitation to share. How could I know to ask 'Are you done with the sports – can I have the sports?' … if you can't see what others are reading you don't know where they are or what they like. *LO, female, 50's newsreader*

Several people talked about buying newspapers on days that are considered to be significant – the election of the US President, Obama, was cited by several people who bought the newspaper on that day.

> I bought the paper on the day of the election, and I bought at 100 days. I want to remember what was being talked about then, I want to remember not just the event but everything that was going on around it. *MO, male, 50's, newsreader*

Journalists and bloggers tended to emphasize contrasts between paper and digital media articulating the ways in which production of these forms are organizationally as well as conceptually divided. This emphasis on support for either online *or* print reading practices, stood in stark contrast with the practices of newsreaders we talked with who consume news in various formats and form factors depending on the current setting, and what is available to them.

> I'll pick up a newspaper now and then, and often a good magazine for longer stories. Most days I check the news on my phone or my computer, but if I am working form a café or traveling somewhere I will get a paper and a magazine. It all depends where I am, how much time I have and what kinds of stories are headlining. Print usually gives me a longer term perspective, they usually do more scene-setting, Online seems more like reading newswire – for an overview not always for getting to grips with the whole story unless you gave time to jump around across a lot of sites to really get a bird's eye view. *NQ, male, 20's, newsreader*

Redefining local: relationships, identity, affiliations, and interests

We found significant differences in the way people conceptualized 'local'. We found an affiliation-and-affinity based as well as a map radial notion of local – within a conversation, these meanings would be fluidly intertwined. Professional gatherings are citywide, streets usually within a mile or two radius, school in terms of parent networks, parking in terms of permit boundaries, and local amenities in terms of district funding boundaries.

> Where I live isn't really my neighborhood. I usually leave my neighborhood to go and do things. I guess I have to care about road works here but that is about all. And crime, I guess that could affect me. *LN, female, 40's, newsreader*

> I like to read about stuff related to school, but pretty much nothing else in this area. It is not where we hang out but I have to care about what is happening with the schools for my kid's sake. For me, I think of San Francisco as my neighborhood for everything else. *LT, female, 40's, newsreader*

> I just live here. This is not what I call my local neighborhood except for obvious things like if they change bus routes. But when I leave San Francisco, I feel like Marco Polo. *EI, male, 50's, newsreader and art columnist*

> I like to know what is going on in this area, what new shops are opening and if there is a street fair and so on. So yes, I guess I would call this my local neighborhood and I wish SFGate would be more relevant to me that way. *BB, female, 30's, newsreader*

> I don't know this neighborhood - that is I don't know anyone here really. I know the shops and houses better than I know the people. There's a school near me and I see the parents every morning and I wonder where they live because I never see them on the streets at other times. *QL, male, 40's, newsreader*

Despite apparent ambivalence to local news reporting, place affiliations ran deep, and were discussed by a number of interviewees. A sense of place and the flows of information within it are fundamental to personal and social identities. For example, location plays a strong role in terms of the perceived social currency of staying up-to-date with news events. CE, a woman in her 30's states:

> I lived in DC for a long time and it is really political there, you have to know what is happening all the time, that is the nature of the city. That is what people talk about in bars. Here, in San Francisco, I don't have to keep up with what is going on. There I'd look like an idiot if I didn't. *CE, female, 30's, newsreader*

Interest in local news was closely associated for many with physical infrastructure and local services - changes in local vendors and restaurants, local amenities (swimming pools, roads, water mains, etc), schools, local events such as street fairs and farmers' markets, and somewhat more broadly, local politics. To a lesser extent local personalities were discussed, but almost without exception local crime statistics piqued people's interest.

> I have a dedication to the police blotter. And I read the property news, and the obituaries. That is a writer thing – I like to read about people. I like to read their stories. *LO, female, 50's, newsreader*

"Local" was used to describe things physically proximate or within a proscribed neighborhood, but it was also related to affiliation and personal identity which in turn underpinned different forms of civic participation; 'local to me' can mean shared membership in a (sub)culture, causes/people that are emotionally close, and/or related to a subjective sense of home. Local can associated with affiliations to causes, activities and groups (e.g., sports teams) from towns people have lived in previously, and with human relationships; 'local' may not be tied to any physical place.

> There are a lot of things that are local things that would interest me but it is not local the way city newspapers define it. It's local in terms of my personal world and how it expands out and that includes the people I know and the communities that I am involved in and the issues that I am interested in. *QL, male, 40's, newsreader*

Local news can be linked to a nostalgic sense of identity and to identifications with places far distant.

> There is a [weekly] Chinese or I should say Asian - newspaper that is given out and I see people queue around the block for it …I think that is about the culture and being displaced and keeping home alive. These are I guess mostly older people – like early 40's to very old. Not the young ones. It comes a couple of times a week or once perhaps. It is like two city blocks of line! *NU, female, 50's, newsreader*

A key finding unsurprisingly was that most common news "channel" is word of mouth through groups one identifies with; news spreads through conversations, and we often heard of individuals who take on the role of the contemporary "town crier", summarising and collating snippets of relevant information. Again, this reflects that 'locality' may be based on human relationships, more than geography – perhaps explaining the growing popularity of sites like FaceBook and services like Twitter.

> For events I mostly I usually just hear through word of mouth – what is going on. If people come into town I may go and take a look online – on MySpace. I am part of a group and they post things to do. It helps to be queer because wherever you go you have a community. And that means I always feel like I know people and can find out what is going on. So if there is news and it is relevant no matter where I am I can get hold of information. *TT, female, 20's, newsreader*

Interestingly journalists and bloggers mentioned how readers like personalities who write news stories. While a number of our interviewees liked particular columnists, there was a keen sense of missing non-partisan reportage by trained professionals, and blogs were often seen as too focused on hyper-local and therefore too parochial to be considered news – our interviewees drew a fine line between even favored local activism and 'news'.

> You know, sites like seeclickfix let me go and be active in my neighborhood now. And that is good. But that's not news. I don't need someone to tell me there are potholes in my 'hood. I can see them. But it's good to go there and register a complaint, talk to others about it and see who I can work with to get this fixed. But if there was a place where these all came together, you know like with crime sites, you know where they show what crimes just happened in the 'hood: that would make me feel more connected to local than the papers ever did. But these sites don't give an overview like the papers should do. You need both. *TT, female, 20's, newsreader*

In particular, local newspapers were seen by some as performing important work monitoring and reporting on local government activities.

> If [papers are a] check on corrupt government and business, if that doesn't exist, what do you do? *QC, female, 50's, newsreader and local activist*

Local newspapers could perform a role of broker between different communities. Several participants said they would like to see their papers put more emphasis on helping different communities within local areas communicate more effectively. A number of interviewees articulated a strong desire for multi-language new services.

> This is a neighborhood with a lot of different people – tourists, Chinese, Russian – rich people and people with less income…I see a big divide between like me and my next door

> neighbors. How do you bridge that gap? I encounter the differences all the time. I don't feel like I know what world they live in even though they live next door. If I spoke Chinese I would have a very different experience of my block. It'd be great if someone who knows about the overall picture could help us communicate – then maybe it'd be a neighborhood not just a bunch of people living in the same place. *LT, female, 40's, newsreader*
>
> You know San Francisco is the gateway to the east. Why don't our local news people take advantage of that? Position us in the world, from my neighborhood to the world? *CE, female, 30's, newsreader*

Perceptions of quality: credibility, findability, and aesthetics

Woven through our interviews were various definitions and perceptions of news quality. Quality of reportage, and a tension between partisan content and unbiased reportage were key, as was a deep suspicion of outsourced and service news. Judgments from interviewees fell into three broad categories: *credibility, findability,* and *aesthetics*. Credibility encompassed accuracy, objectivity, and trustworthiness. Findability involved relevance, completeness, timeliness, and permanence. Aesthetic concerns ranged from the appeal of the layout to the literary merit of the text to the actual feel of the paper. Many respondents rolled multiple dimensions of quality into an overall judgment that determined their engagement and willingness to pay for news.

> The [San Francisco] Chronicle has never been as poorly written as it is now. I think they have given up. I was looking for movie listings, so I bought when I was in town the other day and it was impossible to find movie listings. I mean, how hard would it be to print a set of movie listings so they were easy to find and read.? And you know you get to SFGate and it is just cluttered. *EI, male, 50's, newsreader and art columnist*

For most of our interviewees, reading the news, or choosing not to do so – local, regional, national or international – is an emotional business, and closely tied to perceptions of news quality. BN, a woman in her 60's, said "I get so annoyed with sloppy reporting", and EI a man in his 50's referred frequently to his "frustration" with local news reporting. Due to the perception that news reporting is so poor, interest in the news follows oscillations of curiosity and apathy. "Why bother?" You know they are just going to sensationalise everything," said BM, a woman in her 30's.

Credibility was assessed using many different cues. Some interviewees tended to conflate the medium with editorial practices. For example, several respondents noted that they trusted or appreciated the editorial process of the papers in contrast to online independent sites.

> With all the problems, and there are plenty, there really is something about people who know a beat. There really is something about the value of editors, which tends to be elided in all this. There really is something in the value of fact checking, and if someone's on a beat, and they've been covering an issue for a long time, they know what to make of the next news thing coming down the pike. Like, you know, 'this person is usually a weasel' or 'this has been an ongoing issue for a long time.' *QC, female, 50's, newsreader and local activist*

> With a blog I feel like I have to evaluate every single one to decide whether to believe the content or not. They are not necessarily trusted sources. *BH, male, 20's, newsreader*

Findability was a major challenge for many participants. Sometimes these challenges were the result of bad design; sometimes the result of a lack of precision in returned results; and sometimes due to the structure chosen by a publisher for its site. Respondents described bad experiences that resulted from both too much and too little information, and the violation of expectations in the search experience was a common theme.

> I have looked online for websites that list events but even when I find somewhere somehow it is not tailored to easily finding stuff. It is not at the right granularity. There is like a billion things on the site. And there is no way to filter down to things that are of interest to me. And I can't personalize even if I do spend time on a site. It is like I have to drill down all over again. *BH, male, 30's, newsreader*

> You know I typed in "News today Noe Valley" and what I got back was just a lot of stuff from months to years back. I mean how hard is it to return something with today's news? What is so hard about understanding what "today" means? *NU, female, 50's, newsreader*

Search for time-bounded or time specific information proved especially difficult for many respondents.

> I searched for the front page for a date online – I wanted to see what the front page was for that day, what it looked like. And I could not find it. The benefit of dynamic content is that it keeps fresh. But it has the downside that it has not persistent, not stable. I can pick up my paper from last week and see what was in the news then. I can't find the front page for the New York Times from a day in the past – you know see what the "front page" looked like for that day. That bugs me. *CE, female, 30's, newsreader*

Some interviewees lamented the lack of completeness of local news reporting, and how important information is not available on any news source, online or offline. It wasn't the quality of what made it into the paper, so much as what did not, that caused readers to perceive a lack of quality. Given the absence of space constraints online, as compared to the tight space constraints of paper, this suggests a possible opportunity for news publishers, who can act as databases for community information.

> I feel like I know more about what is going on in Sri Lanka now than I do about what is going on in San Francisco...like I heard about someone being shot like on my street corner and I looked online and there was nothing about it. I don't know – it seems that would be important to have in a report somewhere. Like someone will be killed. And the police come to my door and talk to me. But I can't find any information about the shootings that are happening in my neighborhood. Maybe they are trying to cover up the violence, or maybe noone in the news agencies cares – not a big enough story. *TT, female, 20's, newsreader*

Finally, we found that advertising is a big part of the experience with papers. While sometimes advertisements are important content, they also affect perceptions of trustworthiness, relevance, and aesthetics, usually in a negative way.

> I hate the Bay Area Guardian there are so many ads. Really it is just a bad experience. *CE, female, 30's, newsreader*

> What won't change is the fact that advertisers will affect editorial especially in the arts. Even the most upright magazine in the world will pay more attention to a film or an album that advertizes with them, that pays. *EI, male, 50's, newsreader and art columnist*

> You know, if the ads suck, then the whole paper sucks, and if there are more ads than content, why bother? That's the Yellow Pages, not a paper--but with worse layout. And like what's with putting an ad for a burger joint next to a story about diet and fitness. *BH, male, 30's, newsreader*

Yet for all that, the advertisements give a voice to small businesses that are part of the community.

> We're not getting Macy's ads, but we are getting dog walkers, schools, retirement homes, window washers...all people without way to advertise...they can do a card on a noticeboard [or advertise in the local paper]. *KC, male, 60's, newsreader and local news editor*

TAKING CARE OF BUSINESS

In every phase of this project we found surprising disconnections and anomalies: again and again we saw a divergence between what consumers experienced and wanted, and what the producers we talked to conceptualized as being customer needs and wants. Demand for news and information is intense, yet the business side of most news organizations is deeply troubled. New low-cost approaches for news-gathering, production, and publication are gaining adoption, but haven't yet synchronized with readers' evolving news reading and consumption habits. The balance between anticipating readers' needs and desires, and answering readers' direct queries via search is in flux, and reflects a need for better models of reader interests and behavior.

The easy ability to link and move between different sources quickly is changing the context of every news report, and the switch from broadcast and publishing to two-way reader engagement is far from complete. Both readers and publishers sense the potential usefulness of innovations in media, and we found several opportunities for innovators to close the gaps we discuss here. For example, service redesigns to handle more sophisticated notions of locality, time, and culture, and improvements in relevance, engagement, and aesthetics could improve the perceived quality of news offerings. Regaining credibility and trust by separating advertising and partisan content from "unbiased" reporting, building new opportunities for engagement, allowing readers to make their voices heard, and to bridge between different cultures within an area all stood out as possibilities. Similarly, we found in news organizations a separation of online and offline content production, while readers clearly craved online and offline sources to be part of an integrated fabric of information provision. Producers are not naïve; interactions with journalists, publishers, and former journalists revealed a level of frustration that matched or exceeded that of the readers we spoke with, and a desire for new forms of engagement made possible by innovations in media that they were keen to understand and apply. This begs the question: wherefore lie the sources of resistance and inability to innovate?

For our design research purposes, we see these and several other areas that could fruitfully be explored for business service redesign:

Quality has many dimensions. Perceptions of quality can be addressed at interface/interaction, infrastructure and strategy levels – where strategy includes selection of content and editorial focus. Now that newspaper web sites represent large collections of readily available information archived through time and hyperlinked into the present, rather than physically and temporally bounded single edition, interaction models must change to ease the frustrations users now experience. Despite the capabilities of multi media representations available today, current content presentation was roundly assessed as offering very poor integration of media resources, and algorithmic means of finding "related" content have a long way to go before satisfying human needs and anticipated associations. At the other end of the temporal scale, we need to think through the implications of continuous updates and real time reporting, often to mobile devices, as opposed to periodic "editions." Finally, lack of oversight regarding the ways in which advertising and other content co-exist is at odds with a wholistic reader experience–while advertising can be flagged as such through graphical and textual cues, the placement of advertising and story content should subject to editorial review in terms of the overall reader experience.

Local is not simply spatial. There are opportunities in a redefinition of locality. Most of our interviewees viewed a focus on the 'hyperlocal' – quoted by our industry interviewees to be "the way of the future" for local news - as being too parochial. Hyperlocality based on geospatial maps contrasts with readers' notions of spatial and intellectual/emotional locality. We saw clear opportunities for local news that creates civic bonding and community through current news reportage but also through memory and sentiment about place. We saw opportunities for a brokering role between different subgroups who are geospatially proximate but culturally distinct; local news services can be brokers between different cultural and language contexts (Latin, Chinese, African American) and immigrant populations. Finally, there are opportunities for a clearer brokering of international, national and geospatially local content.

SUMMARY

In this paper, as a complement to related work that has focused on trends and on broader cultural impact on local and national civic engagement, we have elaborated reflections offered by newsreaders, local journalists and bloggers. Despite disruptive changes in the production and consumption of news, human needs and concerns about local news are comparatively enduring. Rhythms of news reading are changing to accommodate the various digital and material forms that are available, and we found readers to have a sophisticated sense of how to integrate these forms into their daily lives. Frustrations included poor information and interaction design and a concern for quality and credibility of news reportage and coverage.

Understanding the role of news organizations and their products (not just paper forms) in local knowledge dissemination is essential. Our results indicate two key areas of disconnect between news producers' and newsreaders' views of local news. First, notions of local are, in producers' eyes, strongly aligned with geo-spatial location - readers define locality much more fluidly along social, affiliation, affinity and interest lines in addition to spatial location. Secondly, we noted that while readers are moving between representational forms with ease, perceiving news wholistically, organizations and business models separate print and digital production, and do not manage readers' experience of content well – neither from a interaction and information design perspective, nor in terms of exercising of editorial and layout control over the quality and form of advertising content. These factors introduce barriers an integrated experience. It would help publishers to identify and describe different forms of resistance to innovation by news producers, and to more deeply understand the relatively sophisticated reading practices of consumers.

Local papers exist in an information ecosystem, not in isolation. Marshall McLuhan famously remarked "new media contain old media." Newspapers are no exception: future 'papers' will contain and be contained by new media. However, we need to deeply understand the move from "old media" to "new media" communication channels (Webster and Phalen, 1997), and understand what the "media structure" (McQuail, 1997) which is usually discussed at a cultural level under the epithets "convergence culture", "media structure" and disaggregation (Lull, 2000), really mean for everyday news readership practices. The most successful incumbents and new entrants in the news business will be those who introduce innovations, but also meet old needs in innovative ways.

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Designing for Turkish Users: Analyzing the Industrial Designer – User Relationship in Turkey

ISIL OYGUR
Interdisciplinary Design Institute, Washington State University

From the perspective of industrial design, user-centered design denotes more than a methodology to understand users. More importantly, it is a medium to create a relationship between designers and users. While user-centered design has much to offer, user research is not a convention in emerging economies. In this context, this paper puts one such emerging market, Turkey, under scrutiny. Six case studies give a snapshot of the current status of product design in general, and user-centered design in particular, in this country. One of the key findings is that, compared to the West, there is a wider gap between designers and users in the Turkish context. Besides economic situations, the eclectic character of Turkish culture plays the biggest role in the expansion of this gap. The application of Western oriented research methods and concentration on global trends also stand as barriers for user-centeredness. In order to ensure products' success through research, Turkey needs to develop its own user-centered design model.

INTRODUCTION

For most designers[1] and design researchers, user research in general, and ethnography in particular, is a useful methodological strategy to learn from users. "From the beginning, ethnographic studies showed major discrepancies between designers' intended uses of their products and consumers' everyday behaviors" (Wasson 2000:378). These discrepancies have emphasized the significance of the designer-user relationship and moved the focus on to the existence of a gap between these two groups (Voss et al. 2008; de Oliveria and Baranauskus 1998; Margolin 1997).

As a methodological strategy, ethnography provides opportunities to minimize this dissonance between new product development teams and the users of their products, by moving researchers, designers and firms closer to users' contexts through systematic inquiry. This strategy forces designers to get out of their offices and "immerse themselves within the user experience" (McDonagh et al. 2002:233). While ethnography can provide a strong tool for the development of products and services, it has not been fully employed by the wider design community around the world. The situation in developing countries and emerging economies is no exception (Amir 2004; Buchanan 2001).

1 In this paper the word 'designer' is used to refer to 'industrial designer' unless stated otherwise.

One of these emerging economies is Turkey. Socio-economic, cultural and educational conditions in Turkey limit user-centered design approaches. Designers are a unique social group mostly located in Istanbul and are quite different from the wider population both socially and culturally. Concentrating on global trends and trying to import Western-centric user research methods without adapting them to the specific needs of this context amplify the distance between the designer and the user.

This paper offers a perspective about user-centered design approaches in Turkey based on my master's thesis that was finished in 2006 (Oygur 2006). While the issue of analyzing all of the aspects of user-centered design and ethnography in Turkey is too broad for the scope of this paper, industrial designer-user relationship as a component of user-centered design is not. Through the lens of six Turkish products, I endeavor to identify the forces causing a "void" between the designers and the users. While sharing my findings, I will also provide insights about design in general, and user-centered design in particular, in 21st century Turkey.

DESIGNER-USER RELATIONSHIP IN THE 21ST CENTURY

Industrial Designers Society of America (IDSA) defines industrial design as "the professional service of creating and developing concepts and specifications that optimize the function, value and appearance of products and systems for the mutual benefit of both *user* and *manufacturer*" (IDSA 2009, emphasis added). Despite this emphasis on users, designers cannot always project how products will actually be used in real life settings, what users need and what their unique experiences with products might be.

Furthermore, designers might not necessarily share the same context with the intended users of the products that they design (Kristensson et al 2002). An average designer does not represent the majority of the society (McDonagh et al. 2002). This situation causes problems for the users who struggle with the functional and emotional aspects of products (Norman 2002). For instance, the history of computers vividly illustrates the struggle of users with the early user interfaces. These early interface designs clearly showed that designers cannot solve complex problems solely with intuitive approaches (Schuler and Namioka 1993). The development of new products and services require in-depth information about users that can only be acquired through systematic research. In this context, methods borrowed from social sciences, with the contribution of design researchers, play a crucial role in bridging the gap between designers and users.

In the traditional design process, the relationship between designers and users is in the form of writer-reader model (de Oliveria and Baranauskus 1998). The information flow is only unidirectional, from designer to user. This unilateral relationship is assumed to be one of the reasons behind the product-usage mismatches (Hasdogan 1996). However, "the exchange of information between the designer and the user" is a possible solution for the problem (de Oliveria and Baranauskus 1998:8). This mutual information exchange requires interaction between two groups. Design researchers coming from various backgrounds have laid the foundation of this interaction (Sanders 2006).

Currently ethnographic research and the activity of design researchers in new product development teams is not the standard for most design processes. Designers try to fulfill this gap with user-centered design approaches and endeavor to work as researchers themselves using informal or ad hoc methods.

This is especially true for emerging economies and developing countries where user-centered design and ethnographic studies are generally luxuries that most firms cannot afford. The lower socio-economic conditions and the limited availability of human resources make it hard for companies and design offices to conduct ethnographic research. On the other hand, an increasing number of global companies such as Intel and Microsoft now employ "user-centered design teams to develop products that better fit users' requirements in different localities" (Boztepe 2007:514) as successful design in these conditions requires product development teams to "… deeply study experiences people seek within particular cultural contexts" (Kumar 2004:3).

A BRIEF INTRODUCTION TO DESIGN IN TURKEY

> A search for national identity in industrial design has not become a central issue in Turkey until the late 1990s. This delay is due to both a strong modernist heritage of industrial design education imported from the West, which effectively limited design explorations inspired by local cultural values, and the conservative strategies of Turkish companies that just followed of the established design trends and the leading international brands. (Er 2009)

Turkey, as an emerging economy located in-between Europe and Asia, only recently started to realize the value of studying local culture in response to user requirements in the country. Industrial design, which does not have a long history in Turkey, entered into its "take-off phase" in the early 2000s (Er 2009). Istanbul, the biggest city in Turkey with more than 12 million residents, is becoming an international center for creativity where designers assemble (Er 2009). It is the eclecticism and pluralism in Istanbul that is increasingly attracting artists, designers, writers and other creative professionals from all over the country and abroad. Turkey has a long and diverse history. The profound influence of the history is still very much alive. Turkey is "Asian but also European, Islamic but also secular; modern but still traditional" (Er 2009). It has the unique characteristic of being the only secular Muslim country in the world. Since the establishment of the Republic of Turkey in 1923, Turkey has modeled itself on the West. These convergences define the Turkish culture and Istanbul is a city that offers a unique blend of these pluralities. Yet, this significant aspect of Turkish culture, its eclecticism and multi-centeredness, has not become an area of study for Turkish design research.

The initiation of industrial design in Turkey, similar to other countries on the periphery, followed a unique path. Industrial design education in Turkey did not originate from the demand of local industries (Er et al. 2003). Instead, it was imported and initiated by the West as a part of "design promotion programs funded and directed by the U.S. Government" (Er et al. 2003:18). This Western model of design education was based on modernist ideologies. It was not adopted to meet the cultural needs of its new context. Instead, the graduates became fierce advocates of modernism. Furthermore, industrial design has been mainly supported by the elite in the country (Er 2009). Export-oriented companies were the early employers of industrial designers (Er 1997). Findings from Anderson and De Paula's (2006) study also apply to Turkey. "… corporate efforts in design and development have been disproportionally focused on Euro-North American values, which has direct implications for corporate innovation" (Anderson and De Paula 2006:76).

Following the developments of the industry and the industrial design profession, applications of user-centered design approaches and user research have increased since the beginning of 2000's, but there has been only a limited impact. A small number of user research firms and labs were established. One of these early academic initiatives is the UTEST Product Usability Unit. It was founded in 2001 and has been providing consultancy services for local companies since 2003 (UTEST 2009). Although these developments are promising, the number of user research studies is still quite small.

SIX PRODUCTS, SIX STORIES FROM TURKEY

This research used a case study approach and focused on six products from Turkey (Table 1). There were three main reasons behind the selection of these six products. First of all, each product was exclusively designed by Turkish designers, developed by Turkish engineers and manufactured by Turkish firms. Second, the target of the products was the local market. And finally, all the products in the study were deemed to be successful from the perspective of the Turkish design community. In order to select the best designs on the market in 2006, a catalog (MarketingIST 2005) published by the only national organization of industrial designers in the country called ETMK (Industrial Designers' Society of Turkey) was consulted. The products in the catalog were selected by ETMK to be displayed at a national fair on the basis of being exemplary products with their design. One product that was not in the catalog but included in the research was the electric tea maker, named Tiryaki, which has achieved large sales figures.

			
Product name	Sunpride Bottle	T-Cash	Zen
Product category	Juice bottle	Cashier machine	Washbasin
Design team	Oya Design	T-Design	CYD
Interviewed designer	Oya Akman (owner)	Murat Armagan (team leader)	Can Yalman (owner)
Brand	Frigo Pak	Vestel	RocaKale
Developed by	Frigo Pak A.S.	Vestel A.S.	RocaKale A.S.
In-house/Freelance	Freelance	Freelance	Freelance
On market since	2000	2004	2004
User research firm	-	-	-
Users contacted	20	10	7
			
Product name	Tiryaki	Telve	Yeni Raki
Product category	Tea maker	Turkish coffee maker	National alcoholic drink bottle
Design team	AID (Arcelik Industrial Design)	AID (Arcelik Industrial Design)	Designbase
Interviewed designer	Umit Altun (was a senior designer in AID)	Erdem Buyukcan (senior designer)	Gamze Guven (owner) – Mete Ahiska (designer)
Brand	Arcelik	Arcelik	Mey Icki
Developed by	Eksen A.S.	Arcelik A.S.	Mey Icki A.S.
In-house/Freelance	In-house	In-house	Freelance
On market since	2001	2004	2005
User research firm	-	7P Think Tank Group	-
Users contacted	20	19	14

TABLE 1 The overview of the products and the study

Based on this initial product selection, 14 in-depth open-ended interviews were conducted. Seven of these interviews were with designers of the products, six with manufacturers and one with a user research firm. Following the designer and manufacturer interviews, a total of 90 questionnaires were completed with the users of these products. Snowball sampling was the main sampling strategy for reaching the users. As many questionnaires as possible were completed in users' actual contexts, namely their homes and workplaces. Therefore, most questionnaires were accompanied by observations and more in-depth conversations.

Case Studies

Among the six products that were analyzed in this research, the last three products have significant connections to Turkish culture. The first three respond to a more universal domain of user needs.

Sunpride Bottle – Sunpride is a brand that offers 100% juices in glass bottles. This is a brand that originates in the UK where it is sold in carton packages. In 2000, Sunpride was to be the first 100% juice on the Turkish market. They wanted to present the juice in a glass bottle to make the product more visible to the user. The decision to use a glass bottle was not supported by any type of user research.

Akman (interviewed, February 24, 2006) designed the glass bottle for the Turkish version of this juice. She used her expertise as a designer and her intuitive knowledge of Turkish culture to guide the design decisions. While her main concern was the haptic issues, she assumed that these bottles would be used for other purposes after the consumption of the juice. Therefore, the bottle should be multi-functional and aesthetic.

14 users surveyed were using the empty bottles for other purposes. From their viewpoint, these glass bottles seemed too valuable to be discarded. Therefore, some users repurposed the bottle to store water and fresh juices (Figure 1). Two of the users were utilizing the smaller sized bottle to store fabric softener on their washing machines located in their bathrooms. One of these users even placed a plastic cup on the bottle to measure the amount of fastener to pour (Figure 2). Still some other users were using the smaller sized bottles as spice jars or larger bottles as flower vases.

FIGURE 1 Sunpride as water bottle

FIGURE 2 Sunpride bottle as fabric softener container

Sunpride costs nearly as twice as the other brands on the market. The product manager of Sunpride defined Sunpride users as loyal customers. From the company's perspective, these users were willing to pay more to get a healthier product and therefore would not consume concentrated juices. However, all of the users in this study were buying Sunpride only occasionally. They always had concentrated juices readily available. Besides its cost, another reason that made users not purchase Sunpride frequently was its bottle, as it seemed too valuable to be thrown away. Both the material selection and the design of the bottle had positive and negative effects on the product's success. This case also demonstrates that even universal products may gain cultural significance in the Turkish context.

T-Cash – T-Cash is the name of the cash register that aims to provide a low cost alternative for small-sized businesses. The company did not expect the product to be used by a wider user segment other than the target group. The product design process started with observations and interviews with the target users done by designers. Three things that were learned in the field defined the characteristics of T-Cash. The product needed to be small because of the space limitations of the intended users. The users were sticking notes on the cash register keys in order to memorize the function assigned for them. Therefore, the key covers needed to be removable to let the users write notes and change them as required. The product was developed while Turkey was switching its unit of currency. The designers realized the need for devices with ultraviolet lights to protect against the spread of counterfeit money in the country. Thus, T-Cash have a self-contained ultraviolet light for this purpose. According to Armagan (interviewed, March 2, 2006), this was one of the main differentiators of the product.

As it was foreseen, all the places where this product found were small-sized businesses. Although most places had space limitations, the product was unable to fit in small spaces as it was intended by the design team. The cash register requires a separate money drawer and all the money drawers on the market were bigger than the T-Cash itself (Figure 3 and Figure 4).

FIGURE 3 T-Cash used in a hardware store

FIGURE 4 T-Cash used in a tobacco shop

The counterfeit detector of T-Cash did not attract users as much as it was expected. Users were still utilizing a separate device for this purpose (Figure 5). According to the users, the intensity of the ultraviolet LEDs were not enough. Besides, because of the location of these LEDs, it was not really possible to fully utilize this function. The surveyed users also were not using the replaceable key note function. This might be due to the fact that the places I found this product were not offering a wide variety of products for sale.

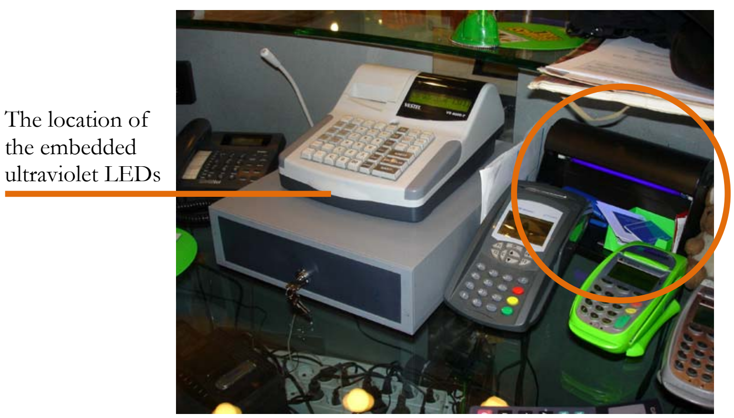

FIGURE 5 T-Cash still used together with separate ultraviolet devices

Despite the designer's efforts to use research in the design process, this product could not fulfill all user expectations. T-Cash has been used by a wide variety of users and businesses each with custom needs. The counterfeit detection feature has become confusing for some users, while it has not been efficient for others. It was generally the owner of the business who made the buying decision of the cash register. However, these owners were not necessarily the users of the product but the employees were. While T-Cash was able to define a design problem based on research, the user feedback point out the need for improvements.

Zen – Zen, the washbasin, was designed to fill a gap in the local niche market by introducing a "designer washbasin." There were very limited number of "designer washbasins" available from local manufacturers.

Zen was one of the design alternatives proposed by Yalman (interviewed, March 8, 2006). Besides relying on his own experiences, Yalman conducted a limited number of questionnaires prior to the development of product ideas. Evident from its name, the inspiration behind the washbasin was Zen Buddhism and Japanese temples. The designer modeled the washbasin to be used by people who appreciate water and find the sound of water to be calming.

When introduced to the market, Zen exceeded its sales forecast. However, it also became evident that there were some issues that failed to be anticipated. The places where the washbasin was found were quiet contrary to the designer's vision. For instance, one of the places where Zen was used is a nightclub where arabesque music was played. Further, the restrictions of the design became evident when it was installed with countertop taps. Originally, the designer developed the product to be used with taps mounted on walls. When coupled with countertop taps, it became hard to turn the tap on (Figure 6). There was not enough space between the mouth of the tap and the washbasin and it was hard to wash hands. Besides, this space limitation was causing the counter to get wet frequently because of the splashing water beyond the basin.

The contradiction between the designer's vision of the product and its actual usage illustrates designers' tendency to concentrate on global design trends. Issues related to usability of products can even not be properly addressed in order to create object forms in Western standards.

FIGURE 6 Zen with countertop tap

Tiryaki – Tiryaki is an electric tea maker. First product of this category was developed without the application of any user research. Based on their brainstorming sessions, the company identified a gap in the market and decided to develop an electric tea maker which imitates the ritualistic tea brewing process. Without occupying any space on the stove, hot tea would be readily available all the time. The product was intended for home use.

The stainless steel version of Tiryaki was developed in order to provide more material alternatives to users. Altun (interviewed, March 6, 2006), who designed the product while working for the Arcelik design team, tried to find an appropriate form for this model of Tiryaki without conducting any user studies. This model was intended for people who believe steel as a material is healthier than plastic, and for the people who can afford to pay more for this difference.

Users contacted stated that they specifically looked for brewing-with-steam feature while making their buying decision. These people do not prefer instant tea. Instead, for them, tea should have been prepared in a two piece teapot in order to avoid direct connection between the heat source and the tea leaves. Most of the users in the study mentioned that they had selected this material alternative of the product as steel fits better with their kitchen appliances. One other reason is that stainless steel is also the most common material of the regular teapot. Also, stainless steel does not damage easily. Tiryaki was readily available on the kitchen counters of all the users (Figure 7). Additionally, five of the products were used in offices.

FIGURE 7 Tiryaki from a house

Tiryaki was and still is a success story in Turkey. Ongoing introductions of new material alternatives to the market are also an evidence of this. Tiryaki was even called as the "engine" of the manufacturer's profit. Based on users' feedback, its biggest quality lies in how it develops a product while still honoring tradition. Although there was no formal user research employed in the development of Tiryaki, the product development team heavily depended on their experiences as tea drinkers.

Telve – This product is a Turkish coffee maker. Besides in-house teams, a freelance user research firm participated in the process and conducted multiple focus group studies, interviews with Turkish coffee fans and ethnographic studies at homes, cafes and restaurants.

Telve was designed for small and medium-sized businesses. When the firm decided to develop a Turkish coffee machine, they first started with user research. Early ethnographic and focus group studies revealed that Turkish coffee drinkers were not happy with the taste of Turkish coffee prepared by machines that function similar to espresso coffee machines. These users do not prefer drinking coffee in public places because of its taste. The tradition is to brew Turkish coffee in a special pot on a stove. The mixture of water and ground coffee should be heated from the bottom in order to give Turkish coffee its unique taste. When researchers and the designer realized this, they aimed at developing a new system that imitates this traditional process.

Despite the fact that Telve is sold for around $250, when it was first introduced, it was a big hit in the market (Figure 8). Although not intended, the product immediately appeared in homes as well (Figure 9). The users have been happy with the taste of the Turkish coffee made by Telve, not recognizing any taste difference between Telve and regular Turkish coffee prepared on stove. After a few years, the company also introduced a two cup version of Telve.

FIGURE 8 Telve used in a coffee shop

FIGURE 9 Telve used in a house

The user-research firm that took part in the development of Telve stated that they had experienced problems because of the difficulty of applying the Western oriented research methods in Turkish context. Firms in the arena of user research have imported these methods without any adaptation. However in Turkey, there are wider socio-economic, cultural and educational differences among people that even share the same occupation. This brings an unpredictable diversity among Turkish people. According to the research firm representative, applying the Western research methods does not yield to meaningful analysis in Turkey. Besides, the user research services are very expensive in Turkey compared to Europe and US. Thus, manufacturers paying for this expensive service have been disappointed with the research findings.

The design and development phase of Telve illustrates how these problems were overcome with close collaboration and the balance between intuition and research. There were points in the process when the input of the users was highly valued and there were even times when those were disregarded. Researchers also took the responsibility of deciding what to value.

Yeni Raki – The traditional alcoholic drink of Turkey is called raki which is made from anise. Yeni Raki is the oldest raki brand on the market. When the company changed ownership, the new owners decided to renew the image of the product based on qualitative and quantitative market research findings. They started with the bottle of the product. After collecting multiple bottle design suggestions from six Turkish designers, the company conducted multiple focus group studies. The design proposed by Guven (interviewed, March 9, 2006) and Ahiska (interviewed, March 14, 2006) got the best feedback and was produced.

Designers of the product intended to reach men with their design. Although women drink it too, raki is believed to be a masculine drink. Therefore, the new bottle should not be feminine. People drink raki with food and they generally spend hours on the table. The bottle sits on the table in these hours as well. As a result, the bottle becomes a part of the raki drinking ritual. On the other hand, there had been classic bottle design associated with raki. Designers wanted to come up with a product that could be associated with raki from then on. Based on their personal experiences and interviews with friends, they designed a bottle that they believed combines the simplicity of the West with the orientalism of the East. This form would also remind users of the long history of raki. Besides, the curved body was for increasing the haptic stimulus.

While designers might be successful in terms of their haptic goal, the message users read from this bottle was very different from what designers intended. Half of the users connected the bottle to a woman figure. They felt like holding the woman's waist while handling the bottle. While there were some users that found the new bottle design feminine, overall, people were happy with the new design as they did not care about the bottle as much as the drink inside it.

The message that the users and the designers got from the bottle's form illustrate the differences between these two groups' visual perceptions. While this difference might not be necessary for this product, it might have created product-usage mismatches in more technology oriented products. One reason that was highlighted by the designers for this differentiation in perception was their education and visual training. Through exposure to design and art history, designers become more visually trained. While this creates advantage for most designers, it was also stated that designers see themselves as the ultimate arbiter of the object forms.

ANALYSIS AND DISCUSSION

Based on the findings of the study, it can be argued that even in the presence of user research or user-centered design approaches, there still exists a difference between designers' intentions and users' perceptions. While there are multiple dimensions behind this discrepancy, according to the case studies, heterogeneity in the Turkish culture is one of the biggest reasons.

'Culture' itself, with its heterogeneous structure, stands as the biggest barrier for the dissemination of user-centered design applications and user research in Turkey. Because of being both Asian and European, Islamic and secular; modern and traditional (Er 2009), multiple identities become equally dominant in Turkey. Estimating the socio-economic, cultural or educational conditions of people based on their professions is very difficult if not impossible. For instance, while one can estimate how a professor lives in Europe, this cannot be applied to Turkey. Depending on where the professor works (the east or west side of Turkey, in private or public sector), there can be huge differences between the professors.

Because of the plurality of the culture, designers do not believe in the benefit of user research in a Turkish context. While all of the designers in this study believe in the benefit of researching users, for most of them, researching Turkish users is not the same thing. From designers' point of view, either there are not many developments in Turkey or they cannot end up with good design solutions based on Turkish users. For instance, one of the designers believes that designers should impose their personal aesthetic preference on users. If they are to follow Turkish users' taste, they would have oriental forms rather than Scandinavian ones. Two of the designers also stated that they would have gotten more confused if they have conducted research on Turkish users as, in Turkish context, there is too much variety in terms user groups which is impossible to deal with.

Since the designers I interviewed do not believe in the benefits of researching Turkish users, they further separate themselves from the user. This situation creates a wide gap in-between two groups. The demographic characteristics of designers make the gap even wider. While all of the designers and the companies participated in the study were based in Istanbul, the users were from nine different cities around Turkey. All the designers were university graduates. However, there were some users who never went to school. As a result, designers do not necessarily share the same context with the users of their products.

For designers, the priority is creating products that follow the Western oriented design trends. For firms, the profit is the biggest concern. They try to compete with low prices in the market and in order to accomplish this goal, they apply budget cuts to design and design research. However, for users, the most significant issue of a product is related to the culture. For instance, the Tiryaki as a tea maker that simulates the tea making ritual in Turkey has achieved great success. On the other hand, as in the case of Zen washbasin, the designer-user disconnection causes frustration for the users.

Design education plays a critical role in the attitude of designers towards Turkish users. The design education initiated by West (Er et al. 2003) is still the most dominant determinant of contemporary design education in the country. In this sense, industrial design departments aim at educating qualified designers in the Western sense. The European, Scandinavian and American designers serve as idols. Designers try to follow international journals, Western design trends and participate in international fairs. As discussed by Er (2009), designers coming from this background have long struggled to create a Turkish design identity based on Turkish culture. Since the beginning of 2000s, Turkish designers started analyzing culture with their products. But the term "culture" in this environment does not include the user culture. These applications are mainly limited to superficial application of historical motives and patterns to modern products such as the one on Figure 10.

FIGURE 10 An example from the interpretation of culture by designers. 'Feza' wall tile from Kalebodur (Orientile 2009).

In Turkey, a market for designers is still in the development phase (Er 2009). Firms and designers are still learning how to collaborate. This causes tension for the designer who graduates without really realizing the professional conditions in the country. Besides few examples[2], design education in Turkey has not yet been fully adapted to the contextual needs.

The user research methods introduced into Turkey resembles the initiation of design education in the country. Similar import of design education to the country, user research methods have also been imported without any contextual adaptation. Both the designers and firms identify the unique sides of Turkish users which make user research more complicated in this context. Furthermore, the economic limitations and availability of human resources also create further restrictions. In this environment, rather than trying to adopt Western

2 Since 2003, Istanbul Technical University, Industrial Product Design Department has collaborated with Small and Medium Size Enterprises (SMSE). Students have been required to collaborate with a SMSE for a semester long graduation project.

research methods, Turkey might need to design its user research and user-centered design model to better serve the Turkish community.

CONCLUSION

Contemporary ethnographic praxis and literature generally emanates from the West, as does research about emerging economies and developing countries. In this context, ethnographic research and user-centered design as practiced in these locales has not been adequately studied. This paper offers insights on the state of user-centered design in Turkey, an emerging economy, with a focus on industrial designer-user relationships.

As the six products in the study exemplify, some products achieve success in the local market by aligning with specific cultural needs. While these products are deemed to be successful by their producers and designers, we cannot be sure if their market success is a coincidence or not. Most of these cases involve neither in-depth research on users, nor include user-centered design approaches. The greatest challenge that faces Turkish manufacturers and designers is consistently creating successful products. A thorough analysis of the current state of the design research and user-centered design in Turkey is a crucial first step for overcoming the barriers.

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Consumerization and Renewing Peoples and Practices Research

DAWN NAFUS
Intel Corporation

ROGERIO DE PAULA
Intel Corporation

KATHI KITNER
Intel Corporation

RENEE KURIYAN
Intel Corporation

SCOTT MAINWARING
Intel Corporation

TYE RATTENBURY
Intel Corporation

This paper documents the beginnings of Intel's recently launched Consumerization project, and uses these early experiences as a way into exploring new paths to business relevance and impact. These paths weave in and out of the increasingly institutionalized position of corporate ethnography as research that takes place before products are designed. These paths are one response to wider transformations in the business environment, and are not a general prescription, "ethnography should now do X in corporations." However, this project does embody a significant move away from past modalities of conducting and applying research, and in doing so reveals broader possibilities for ethnography that may prove viable for others in different contexts. We begin by providing some institutional history and exploring the wider industry transformations that compelled us to design a research project in the way that we did. The paper goes on to describe our approach in meeting the challenges of this new environment, both conceptually and methodologically. Finally we reflect on some of the very early partnerships we are now able to cultivate and grow as a result.

INTRODUCTION

This paper documents the beginnings of Intel's recently launched Consumerization project, and uses these early experiences as a way into exploring new paths to business relevance and impact. These paths weave in and out of the now institutionalized position of corporate ethnography as research that takes place before products are designed. These paths are one response to wider transformations in the business environment, and are not a general prescription, "ethnography should do X in corporations." However, this project does embody a significant move away from traditional modalities of conducting and applying research, and in doing so reveals broader possibilities for ethnography that may prove viable for others in different contexts. We begin by providing some institutional history and exploring the wider industry transformations that compelled us to design a research project in the way that we did. The paper goes on to describe our approach in meeting the challenges of this new environment, both conceptually and methodologically. Finally we reflect on some of the very early partnerships we are now able to cultivate and grow as a result.

A few words about what sort of story this is. Intel is one of a very small handful of large firms with a long history of engaging with ethnography. A surface reading of Intel's adoption of ethnography might fit into the genre of a success story. Social science has been present in the company since the early 1990's, and has been growing and thriving over the long term. Its hard-won position can be seen as the result of the work of visionary individuals who successfully made the case for its role. The longevity, however, also obscures the constant transformations, heterogeneity and uncertainties that continue to shape what ethnography is about, even within this single institution. In this way, the Consumerization project is not a story that sits at the end of a 'mature' trajectory, linearly implemented as a series of steps toward a successful outcome. In many ways our experience is one of having been shaped *by* the business and the constant transformations it endures, rather than doing the shaping. Whilst the EPIC conference concerns itself for making a case for ethnography within corporate settings, it is worth noting that other practices and disciplines that straddle academic-private sector worlds are similarly subject to wider social and institutional winds not of their making. In this sense ethnography is part of the rule, not the exceptional case.

BACKGROUND: THE NEW PAPR AND THE PROBLEM OF, WHAT NOW?

Intel's ethnographic research efforts developed out of the corporation's longstanding commitment to invest in long-term research, a commitment entailed in cofounder Andrew Grove's well-known slogan, "only the paranoid survive". These efforts first arose not in product development or market intelligence functions of the enterprise, as is the common association today, but in a strategic engineering research organization, Intel Architecture Labs (1991-2001). IAL's mission was a pragmatic one: to increase demand for personal computers by extending their technical capabilities or "new uses for new users"(Gawer 2000). The Labs' dominant practices were the development of specific technologies in internal labs and the promotion of technology standards through industry consortia. Within this context, a small group of psychologists, engineers, and (later) anthropologists began experimenting with fieldwork-based methods to critique and inspire these technology innovation efforts, originally terming this "engineering ethnography" (Mateas 1996). As the

Internet Bubble of the late 1990s expanded, the group developed bottom-up support within Intel's new business start-ups pursuing pen-based computing, internet appliances, etc.. The perception in this new business mode was that research was providing "actionable" findings about "real people" and "real places" (Nafus and Anderson 2006) that could be marshaled to legitimate (or de-legitimate) particular product development proposals.

By the time of the bubble's collapse in 2000, the group had adopted the name People and Practices Research (PaPR), and had survived internal turf battles over whether both social science and marketing science approaches to consumer research both had legitimacy within Intel. It had begun to institutionalize its role as generator and advisor to new business efforts, primarily by positioning itself as early exploratory research to inform product development, as opposed to research that might help position a product already made, or evaluate willingness to pay for a product. The subsequent collapse of IAL in 2001 forced the group to reexamine its mission and paths of influence. The Corporate Technology Group (2001-2009) succeeded IAL as a central research and development organization. This was to feed technology "pipelines" into the corporation's established product groups (servers, desktop PCs, laptops, etc.), and not be distracted by new business pursuits, now seen as excesses of the dot.com era. In turn, this pipeline-feeder created its own externally-focused subgroup, Intel Research, which conducted academic collaborations and external "technology leadership". In this way, the pipeline had external feelers, of which social science was a part.

Under the Intel Research umbrella, PaPR was able to rebuild and rebrand itself, spinning out pre-competitive research projects with academic collaborations on topics ranging from supporting the aging in place of seniors through in-home sensor-networks, to community-based technology adoption in impoverished areas, to ethnographic analysis of newly affluent technology consumers in Asia. These in turn found resonance within the corporation as the next wave of new business efforts took shape beyond core business—that is, as new 'blue skies' became visible yet again. New lines of business formed--Digital Home, Digital Health, and Emerging Markets Platforms Group—and each demanded its own in-house "pre-roadmap" or "x years from product launch" ethnographic research capability with which to energize the product development lifecycle. About half of PaPR's researchers left to pursue these new opportunities within the corporation, and PaPR began another phase of rebuilding and redefinition.

As of 2009, PaPR is still reinventing itself as one of several ethnographic research groups at Intel, but this time the only one without a defined product development function. Decoupled from any particular product, PaPR continues to enjoy rare breathing room for intellectual exploration, but this freedom is tempered by demands for increased accountability and efficiency in the wake of global economic collapse. As the EPIC conference itself illustrates, ethnographic praxis in industry is becoming institutionalized, and thus facing the challenges of increased visibility, scrutiny, and expectation, and the risks of being appropriated, co-opted, and marginalized. At time of writing yet a new wave of reorganization is underway, and with it will come a new shift in how 'close' or 'distant' research might be to product development. In some ways these challenges feel familiar: yet another oscillation between innovation and consolidation. But in other ways the challenges, and opportunities, of this particular moment are unique, as other similarly-minded researchers are better positioned to do product development work. This forced PaPR to ask, what else might corporate ethnography be?

THE FRAGMENTATION OF THE TECHNOLOGY INDUSTRY

While these conditions are institution-specific, the broader transformations in the industry and business landscape that brought them on were not. Computing has shifted from being a single object sitting on the desktop to a range of devices that are much more pervasive(Adam 2006; Abigail, Yvonne et al. 2009) integrating themselves in people's lives while also breeding their own strains of new behaviors and perspectives. Concurrently, computers have moved beyond the confines of the garages and offices of upper middle class technology enthusiasts to homes, classrooms, and healthcare. Indeed, these are the areas around which Intel's business has been organized. The industry traditionally has used tropes of "necessity" and sufficiently moral uses of computers to argue for computers' ever expanded involvement these aspects of life. While doing so, computing's privileged place in scientific innovation is often marshaled to suggest that they are the key source of modernization, efficiency and elightenment. These tropes have been enthusiastically appropriated by development agencies through discourses of "access" to information and communication technologies (ICTs) for emerging economies as a matter of international development and rights. Intel's own chairman of the board, Craig Barrett, very publicly works with these tropes to bring the supposed wonders of technology to poverty alleviation issues.

Such moralizing discourses now have competition. For example, the mobile phone (which increasingly does what computers have historically done), are increasingly seen as something for everyone regardless of class, with little connotation that states and development organizations might work to ensure the poor have access. Indeed, 60% of the world already does (ITU 2009). Meanwhile, "high end" computing, particularly with the revitalization of Apple, revived the idea that computers could serve as prestige consumer goods, but this time not as innovations straight from the lab, but fashionable markers of cultural capital well beyond the geek clique. Put together, the expanded range and diversity of devices, alongside new geographies in which they were situated, instantiated a broader multivalence surrounding what, exactly, computing was for. These increasingly consumption-focused ethics and meanings are beginning to have consequences for a product that for so long has been positioned as above the fray of ordinary consumption. For example, states and development agencies can now only turn to some forms of computing to solve its digital divide problem, but nothing too slickly consumerist if it is to retain its credibility politically. Yet the argument could be made that the status afforded by new, fashionable devices sets its own form of digital inclusion, where consumption, entertainment, and media serve as coins of the realm. This form of (conditional) inclusion mass markets have historically provided to those lacking in other forms of cultural and social advantage. Simmel writes in his philosophy of fashion: "What is at work here is not only the mixture of individual distinctiveness and social equality, but… the mingling of the sensation of domination and subordination." (Simmel 2003: 239)

We came to suspect that these changes in notions about who technology was 'for' and what was proper consumption of it, were being generated by some deeper institutional, cultural and political factors, and that this was more than just a 'natural' outcome of a maturing marketplace. We suspected that there was a social imagination surrounding who the consumer might be, and why technology users were increasingly also 'consumers', which did more than just narrow down a target market for a particular device. Something more fundamental seemed to be underway. To the extent this imagination was shared across institutions, it may in fact be evolving into a powerful rhetorical resource to make new institutional and social forms possible (and of course, others less possible). The descriptive problem of just who consumers were was more than a question of product development, which by now had become institutionalized as what ethnography is 'for', but actually a force shaping the wider social system in which Intel resides. In these transformations, the consumer was becoming both a source of debate, and a source of nominal consensus that allowed people to talk past one another while seemingly enjoying unspoken understanding.

We have two examples to demonstrate what we mean. In the context of the current US economic downturn, contestation surrounds the figure of the consumer, with people making claims that they never were "consumers." Both elite politicians and ordinary citizens evoke discourses that place the blame for the downfall of the US economy to a greedy figure of the consumer, living on credit card debt and extravagantly spending money they do not have. Yet at the same time there was a widespread consensus that technology is now seen as something stimulating for the economy, the consumption of which was an absolute necessity for the future growth of the country. The US economic stimulus package allocated US $7.2 billion to be used for "broadband and wireless grants in under-served areas to strengthen the economy and provide business and job opportunities in every section of America, with benefits to e-commerce, education, and health care. For every dollar invested in broadband, the economy sees a ten-fold return on that investment." (see: http://www.fiercebroadbandwireless.com/story/wireless-broadband-included-economic-stimulus-proposal/2009-01-19). In this context, it is as if there are 'consumers', but not, apparently, 'technology consumers'. This discussion of whether technology is a 'consumer' product and object of greed or in fact part of the public interest to generate economic growth—and whether those are two distinct things-- in turn spurs renewed debates about how to deliver broadband, who should deliver it (public or private sectors) and to whom.

A second example is the recent push by governments, businesses and development organizations for technologies to target the "bottom of the pyramid" or the world's poorest people. The "bottom of the pyramid" discourse, which controversially renders the poor no longer as targets of aid, but treats them as consumers, makes new and previously unlikely alliances possible among aid agencies, the private sector, and governments. A concept coined by CK Prahalad in 2004, it is a model which posits that by treating the poor as consumers, this can enable the eradication of poverty and simultaneously lead to profits for the private sector (Prahalad 2004). Information and communication technologies hold a favored place in these discussions as a tool to achieve these dual goals. The poor as newly rendered consumers lays new conceptual groundwork to make certain things possible such as new markets for corporations, new forms of delivery of public services for the poor (previously dominated by the government), and new consumer identities to which the poor can aspire.

Ideas about the importance of technology consumption for nationhood and economic development is challenging boundaries and roles associated with the public and private sectors. Many governments around the globe are partnering with technology companies to offer incentives that make it easier for citizens and businesses to purchase or lease PCs for home use through government-assisted PC purchase programs. That is, governments are going well beyond regulatory roles and builders of public infrastructures such as public utilities, and are actively subsidizing the individual purchase of the machines to make use of that infrastructure. In some cases, as with the Magellan project in Portugal, the government is aggressively involved in developing a PC manufacturing industry. The government of Portugal is partnering with a local company to develop an ultra-cheap laptop for school children. It aims to distribute 500,000 laptops to school children in Portugal as well as to export them to initiate new trade alliances with countries in Latin America and Africa. As a result, the state is directly orchestrating a local manufacturing capacity, exporting both the machines themselves and knowledge of how to deploy those machines in schools to countries like Venezuela. Efforts like these shift the meaning of consumption and production, private and public, in ways we need to more thoroughly understand.

Within these various examples the figure of the technology consumer –the imagined agent through which 'stimulus' occurs, or agents of market-centric 'development'--acts as a hub around which diverse set of actors, business strategies, government policies and development strategies intersect in interesting and novel ways. Examples like these reminded us that that the context for a company's products went well beyond their end users, and that we could bring our ethnographic skills to help our "client" (here, Intel) see its wider system of stakeholders and relationships in a new way.

THE ETHNOGRAPHIC RESPONSE

Given this changing landscape and the increasing importance of strange public-private bedfellows, it made sense to begin not with the more common question of "who is a consumer and what do they want?", but instead ask, "What are the institutional, political and cultural processes that create consumers?" Rather than taking this figure as a matter of what lies 'out there' on the marketplace, we launched a research project to explore the strategic work the figure of the consumer does within the industry. Here we are acknowledging the tension pointed out by Mazzarella's work on advertising in India (Mazzarella 2003), where marketers believe the purpose of market research is to find pre-existing 'needs' out there in the world, only to find through their research efforts whatever meme they themselves have created. While the claim is not that advertisers and marketers can invent whatever they please and markets will passively tolerate it, this ambivalence about where agency actually lies in the push and pull between businesses and the markets they serve, became part of the research itself. In phrasing the question this way, we were better positioned to explore the dynamic and shifting nature of consumption, and to understand just how many different groups are trying to influence outcomes by constituting what consumption means.

As we began this undertaking, it seemed that everyone we conversed with had their own ideas about who "the consumer" was, and who the consumer wasn't. Businesses, designers, states, multilateral development organizations, public policy bodies, and indeed, "consumers" themselves all held varying notions around the term "consumer." But rather than having these different and sometimes competing notions of the consumer become the context and background for our research, we made these varied and often times nuanced notions of the consumer the actual subject of our research. The business had fragmented, the system of actors that shaped markets had grown significantly more complex, and so by tracing notions of the consumer, we thought we might be able to help Intel make sense of the now deeply fragmented system it was now in.

The ethnography (underway at time of writing) follows the figure of the consumer as it shows up in the creation of technological infrastructures such as broadband build out in rural areas, the systems of relationships between technology firms, national and local governments, and the multilateral institutions that build them, and finally amongst the talked about 'consumers' themselves. By tracing this figure across varied milieu, we can understand where points of nominal consensus lie, who is talking past whom, and identify places within this system where an intervention might be made, and what kind of intervention might create better conversations across different actors.

Because the issues involved do not take place within a single geography or institution, but rather sit across them, we turned to multisited methods. Multisited ethnography gives us a way to trace the image of the consumer through all of the above loci: business and institutional practices and plans, and discourses and practices around new and old infrastructure creation and revival, and in actual technology consumption, which allows us to understand what discourses are and are not getting through to people and shaping consumption.

To quote Marcus (1998):

> "Although multi-sited ethnography is an exercise in mapping terrain, its goal is not holistic representation, an ethnographic portrayal of the world system as a totality. Rather, it claims that any ethnography of a cultural formation in the world system is also an ethnography of the system, and therefore cannot be understood only in terms of the conventional single-site mise-en-scene of ethnography. For ethnography, then, there is no global in the global/local contrast so frequently evoked. The global is an

> emerging dimension of arguing about the connection among sites in multi-sited ethnography." (p.83)

Marcus is suggesting a de-territorialized concept of a field site. Previous PaPR studies, while involving multiple sites, have nevertheless foregrounded Marcus's mise-en-scene: in China, people value this, in Brazil that. This is not through ignorance of Marcus's argument but through institutional necessity. A key role for PaPR has historically been to answer questions about, is this nascent technology likely to find traction in this new and exotic market? This sort of question necessitates a mise-en-scene answer. In this project, however, it is the interstices, the cultural web that sits between physical, institutional, and social locations, which is foregrounded. We are attempting to draw a figure of the consumer as a kind of global assemblage(Ong and Collier 2005) that sits across different actors in different locales, some of whom talk only obliquely to one another—or not at all. Nevertheless, the literal fieldwork necessarily does have sites. We have selected examples to study that reflect multiple categories of products or infrastructure issues, in order to surface what is indeed a matter of a larger social system, and what is place-specific. We are also working to establish geographic diversity within the project. This does not mean conducting fieldwork in every country, of course, but balancing wealthy countries with poorer ones, large emerging markets with smaller places that receive less attention.

For example, one leg of the project examined class as a process through which consumers are formed in Mexico. Guadalajara and Mexico City are two places where the middle class has been claimed to be on the ascent, and where new consumers might be found, enabled by NAFTA free trade policies which have opened the markets to now easily attainable and desired goods. While in the past we may have focused on what people thought being middle class was, or what the needs of middle class people were that technology might provide, here we looked for traces of how class was being used to shape consumption through shopping malls, technology vendors, supermarkets, large retail trade shows, banking districts, and museums. These are all places where class was as a means by which to create and legitimate consumption, and where middle class people themselves were in fact conflating middle class with consuming class.

Another example is in recent fieldwork we completed in Kenya, where the focus turned more to infrastructure building. The event that has captured the imagination of many Kenyans was the laying of a submarine cable that would deliver high-speed Internet connections from its landing in Mombasa and linkage to Nairobi. Each group of actors had its own version of why this was important, and these versions did not come about through the dominant vehicle of class as in Mexico. The government trumpeted the cable as the rebirth of the nation, and an opportunity for rural Kenyans to "have everything" now that they would have the Internet. Their discourse centers around how best to use the cable to further public education and similar provisioning for the supposed good of people. But technology entrepreneurs, particularly smaller internet service providers (ISPs), are charging ahead laying claim to the new network both by laying out more lines to "hook up the country" and in imagining a wealth of profit from future growing business. Meanwhile, potential users of this technology are talking about how they can finally watch YouTube videos, which, while not exactly a "proper" aspiration for consumption-driven economic growth, nonetheless could be made into one, depending on whether it is framed as consumption or the production of a local media industry. Indeed, there is talk of offering tiered services in terms of favoring Kenyan produced content over what is seen as "non-local" or Western. In these ways, discussions about the coming undersea cable is all about consumption, and who gets to define what consumption is about and why it is important to the nation, the economy, and individuals.

At time of writing the project is all of three months old; the intention is that by surfacing multiple ethnographies of the kinds of (non)discussions that happen around "proper" technology consumption, we can identify patterns and understand what is behind them, in order so that we can better understand how Intel fits into this heady, complicated mix.

NEW CONVERSATIONS

Through this work we aimed put the business in a position to be much more careful about the kind of consumer society it already shapes, intentionally or not. Grappling with this intentionality sensitively and responsibly is a difficult, ongoing issue that many anthropologists working outside the academy will recognize. While there is much to be said about this—too much for this paper—here we wish to comment on the groundwork this lays for making it possible to move outside product development roles.

One change, which was felt by researchers immediately as the project was being launched, was that it became possible to engage with the marketing side of the business without having to talk about uses of specific technologies or translate into a single dominant process of product development. Our new stakeholders, who range from government affairs, to corporate responsibility roles, to education and health groups, to marketing and branding, are not necessarily interested in the ways in which ethnography as a specific practice could inform their design and business decisions. They do, however, have reasons to figure out how their own actions and decisions had (or would have) an effect on these socially-constituted worlds. They do not, of course, put it quite this way, but suddenly, the groups who work with governments and multilateral development organizations became very curious indeed about how Intel's messages get interpreted, and where market opportunities were mixing with economic development efforts. Particularly in a context with stimulus packages being implemented throughout the world, marketers see systems of governance as directly relevant to them, not just setting business-friendly or unfriendly environments. Through this work we are better able to help them understand what it is policymakers may or may not be able hear from the private sector, and in turn are able to signal to their constituents about technology consumption. Eventually, we wish to work toward a situation where we are able to broker new kinds of relationships across different components of the firm—specifically those that deal with technology as a matter of development/corporate responsibility, and those that deal with it as a matter of core consumer business.

The notion of consumers as a construct negotiated through business processes was at times instantly recognized by stakeholders, even though in product development circles what consumers 'want' continued to be treated as a fixed, pre-existing fact. Occasionally, the very presence of consumption as a lens has proved problematic. The very prospect that consumption might be at stake sometimes conjured an illegitimate image of inappropriate business participation. Are students consumers of education technologies? Are poor people consumers of World Bank ICT for development programs? UNGAID, the United Nations organization responsible for technology for development projects, consistently talks about technology 'adoption' as if it were not consumption in its reports and conferences, despite the widespread enthusiasm for Prahalad's bottom of the pyramid rhetoric (met, of course, by equally widespread distaste). Regardless of one's views of Prahalad's claims, there is something about consumption that is uncomfortably and intriguingly revealing about development.

Speaking on such a loaded topic to development communities is further complicated by the fact that our voices necessarily are tied to industry: it may be easier, or it may be more problematic, for Intel researchers to point out this ongoing misrecognition of consumption in development, as opposed to those working in development agencies or academia. The problem, however, is quite close to home. Intel's business increasingly grapples with these questions by moving into areas such as health and education where the 'social' case for technology consumption needs to be made. In some cases it sees itself as a catalyst of development. This is not merely case of industry trying to persuade policymakers of this or that course of action, but industry trying to find for itself an inhabitable position in this problematic landscape alongside traditional development agencies.

CONCLUSION

We have shifted our research to a new set of values, concerns, interests, artifacts, and actors that PaPR has not grappled with before. This shift does appear to loosen the constraints that came along with the institutionalization of ethnography within our corporation. When we began responding to the fragmentation of the technology industry in this way, and started asking what in the world holds it together, we observed a qualitative difference in the kinds of concerns, discussions, and rhetoric, as well as in our own forms of participation. One might view this shift as the design of institutions rather than objects. In this arena, the product line is distinctly discursive – marketing campaigns, new standards, new policies that, particularly as is the case in multilateral development agencies, often do more discursive work than literal action (Ferguson 1994). Such discourses can and do shape business strategies, practices, and values buy shaping the imagination about what is and is not possible.

There is perhaps no news in emphasizing that the value of ethnographic practices lies beyond the unveiling of pre-existing consumer 'needs', and can recursively help the organization shape the impact it has on the market and its partnerships. In this sense our project bears a kinship to ethnographies of workplace organization, where inquiry seeks to establish what holds working relationships together. Here we have asked a similar question but taken unit of analysis beyond the vertically integrated firm. It also is an approach that echoes similar changes in critical management studies (Miller and O'Leary 2007), where accounting is no longer treated as that which goes on inside firms, but something that shapes and is shaped by the wider social relations in which those practices sit. What we take from these kinships is that, while we are doing something very new for a particular context and application, there are plenty of intellectual resources to draw upon, and that others have found it practical as well as analytically compelling to approach both business and scholarly problems in this recursive way.

NOTES

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TANGIBLE Steps Toward Tomorrow: Designing a vision for early childhood education

HILLARY CAREY
IDEO

SUZANNE GIBBS HOWARD
IDEO

> *"The area of early education is experiencing tremendous experimentation and progress, but what has been missing are right brain thinkers. These are individuals whose craft is seeing patterns, making connections, adapting what works in one context to the realities of another context." – Tony Berkley, Program Director, Youth and Education, The W. K. Kellogg Foundation*

In 2007 the W. K. Kellogg Foundation engaged the innovation and design firm, IDEO, to design a compelling vision for the future of early childhood education. The foundation was ready for a new perspective on a well-explored topic. IDEO's design thinking approach engaged the foundation and it's stakeholders in new ways that promoted feasible yet innovative solutions.

In this paper we describe the combined use of ethnographic-style research and design thinking in a project addressing a complex, systemic and philanthropic challenge: public education in the United States. We seek to provide the reader with a clear and convincing case study demonstrating the value of ethnography plus design thinking in any business context or social system where many stakeholders need to be brought together to work toward a system wide solution.

SETTING THE STAGE

> "In a global economy where the most valuable skill you can sell is your knowledge, a good education is no longer a pathway to opportunity, it is a pre-requisite."
> - President Barack Obama to the Joint Sessions of Congress, Feb. 24, 2009

In the current economy, the United States education system has been singled out as the foundation that the U.S. must reset to build a stronger economic future. However, improving education in the U.S. is an enormously complex challenge, filled with competing expert opinions and a vast number of stakeholders. In order to navigate these challenges and refine their vision for early childhood education, the W. K. Kellogg Foundation (WKKF) sought a fresh perspective to reinvigorate their philanthropic programming. WKKF invited our design and innovation firm— IDEO[1] - to help them explore the future of early childhood education in the U.S.

The W. K. Kellogg Foundation is a significant contributor to family and education programs across the United States. They are closely connected to ground level community organizations and sponsor a wealth of initiatives. While many successful programs have resulted from WKKF's support, in 2006 they began reaching beyond their traditional approaches to grow their philanthropic efforts.

As Tony Berkley articulates in our abstract, the fresh perspective WKKF sought was one that involved "right brain thinkers". While WKKF deeply respects and places great value on whitepapers and case studies, they sought something more— a generative vision. They desired a way to push their thinking further, to be informed by domains far outside of the world of education, and to be inspired by new approaches. They wanted a perspective that would help people deeply embedded in the world of early childhood education to imagine new futures and find new connections. WKKF wanted to establish a grounded but provocative vision that would compel a deeply engaged, enormous and geographically distributed community to move forward. This was no small challenge.

At the end of four months, we delivered an engaging and accessible book style report with beautifully illustrated, future oriented scenarios. This style of presenting visions from the world of design contrasted positively with reports traditionally seen in education and foundations. Each of the scenarios contained a handful of design concepts including products, services, collaboration tools, and even brands. These scenarios and concepts were well grounded and supported in research findings, insights, and models. This work has had a significant impact for the foundation, more than their traditional white paper reports. Over 5000 copies of the book have been requested, including requests from Barack Obama's Transition Team and the staffs of the Governors of six states. In addition, thousands of additional copies of the book have been downloaded online. Both WKKF and IDEO have had additional requests for follow on work sessions due to this report.

What helped this report have such impact? A focus on action and future-thinking. A considered design of the final deliverable that takes into account the many different audiences who could build on the content. We engaged the foundation in the research findings, scenarios and concepts. We connected with deep cultural nuances in the realities

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[1] IDEO is a global design consultancy focused on creating impact through design. We cover a wide range of challenges from designing the first mouse for the masses (Apple) to foot powered water pumps for rural farmers in Kenya (Approtec Kick Start Pump). We have designed services such Keep the Change for Bank of America and culture shifting organizational experiences, such as a Nurse Knowledge Exchange for Kaiser Permanente. IDEO has a rich history of helping businesses see their challenges in a new light, in order to foster human-centered innovation. It was our challenge to apply the processes of design thinking that have been refined for business problems over the past 20 years, toward a systemic, philanthropic problem space for WKKF.

and past experiences of teachers, administrators, parents, and the community around the school. We worked alongside the foundation to identify paradigms that had to shift and ways of thinking that needed to be reframed through visions for the future. With this awareness, we could push the scenarios and concepts beyond the boundaries of the present constraints, in exactly the right places.

We not only delivered a future vision, but also we provided jumping off points so that those inspired easily could take action. We connected the future visions to actual experimental programs currently achieving success, and we gave key information to write grant applications to the foundation. As a result, not only have thousands of people accessed the information, but the grant applications are building on our initial concepts and make them even better.

We believe that we were able to achieve this kind of impact due to integrating ethnographic-style approaches with design thinking methods. In this paper, we will highlight three key moments that show how we drew these two approaches tightly together, trying to make a difference at one critical base of our global economy.

WHY DESIGN THINKING?

Our global community faces enormous and elaborate challenges everyday. While ethnography is an excellent approach for deciphering these complex ecosystems, we need to build upon traditional ethnographic approaches in order to not only understand and reframe the ecosystem, but also to pinpoint opportunities, envision unique ways forward, and ground innovative solutions in human needs. It is not enough to report on the elaborate complexities of the system as it is. In order to have greater impactful in the face of vast and pertinent challenges, we must define, articulate and clearly communicate the most relevant paths in to the future. In addition, in today's business environments with heightened attention to many details in business effectiveness and spending, we cannot conduct ethnographic-style insight gathering and assume the landscape of insights will be considered valuable simply for opening eyes or grounding understanding. More creative problem solving should be integrated with research methodologies while retaining deep roots in ethnography.

WKKF advised us early in our relationship that educators might be a difficult audience for a design firm, because our approaches to information are so different. Schools must take on a long-term, slow paced approach to change, because there are so many stakeholders involved and their work is so critical. Because of this, schools more often reach out to the "usual suspects" when looking for new opportunities. A design firm would need to carefully build trust by making our ideas physical and tangible, so that education stakeholders could see the value, and participate with our outsider's perspective.

DESCRIBING DESIGN THINKING– We will describe design thinking in general and then draw out three particular qualities of design thinking that we will emphasize in this case study. At the simplest level, design has been described as "the human power to conceive, plan, and realize products that serve human beings in the accomplishment of any individual or collective purpose."[2] Following this, design thinking has been referred to as "a discipline that uses a designer's sensibility and methods to match people's needs with what is technologically feasible"[3] and also viable in the relevant domain or industry. While design thinking involves thinking about business viability and technical feasibility, the most often focused on lens of design thinking is the lens of desirability. Similar to ethnographic approaches, design thinking begins with understanding people and culture through observation.

However in addition to understanding people, design thinking's other two lenses – viability and feasibility - involve a problem-solving mindset. In a design thinking mindset, this focus on the future requires many other tools to engage people beyond observations and in-context interviews. In design thinking research, it is commonly known that typical research participants are challenged to help imagine new futures - especially in situations where it is difficult for them to imagine anything other than the ways they have grown up, like the future of education.

To understand the ecosystem surrounding a problem, we value ethnographic-style approaches for deciphering complex behaviors and complex systems. However, we also believe ethnography needs the creativity, tangibility, collaboration and visualization of design thinking to move toward solutions for the problems that business, philanthropy and our global economy face. Design thinking helps pinpoint opportunities, enable decision-making, identify unique ways forward, and to build on human needs with visionary solutions. Design thinking uses the designer's skills such as problem solving through prototyping, collaborating and integrating thinking through co-creation and visualization to provide greater access to rich thinking. When tackling large-scale systemic challenges, design thinking and ethnography need to work together.[4]

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[2] Buchanan, Richard, lecture notes, Carnegie Mellon University, 2003

[3] Brown, Tim, Design Thinking, Harvard Business Review, June 2008, p 2

[4] Our point of view here builds upon the thinking of Christopher T. Hill in his article, *The Post-Scientific Society*. Hill argues that post-scientific societies will reap the benefits of fundamental research in natural sciences and engineering, but the leading edge innovations "whether for business, industrial, consumer, or public purposes, will move from the workshop, the laboratory, and the office to the studio, the think tank, the atelier, and cyberspace." Hill goes on to discuss United States society saying, "This is becoming a society in which cutting-edge success depends not on specialization, but on integration—on synthesis, design, creativity, and imagination." Like Hill, we believe that truly innovative thinking must draw upon the most relevant pieces of many approaches, ground them in the particular culture and integrate them successfully.

THREE DESIGN THINKING TOOLS FOR APPROACHING SYSTEMIC PROBLEMS

Sacrificial Concepts - In order to solve the challenges at hand, design thinking involves early prototypes or tangible, conceptual versions of what the future might be in order to help engage participants in imagining new realities. At IDEO, we often refer to these artifacts as "sacrificial concepts" and this technique as "building in order to think." By taking prototype versions of the future, no matter how roughly imagined, and sharing them with others, design thinkers are able to provoke deeper conversations about not only the "now" state at hand, but also about what the future might need to hold. This was essential in connecting authentically with our education stakeholders.

Co-creation Sessions - A second key factor that design thinking brings to the table is collaboration and integration of multiple perspectives. Often design thinkers integrate perspectives by hosting co-design or co-creation sessions. Design thinking offers many tools for bringing stakeholders into conversations that allow people with vested interests to participate and collaborate together in new ways.[5] Again, when it is challenging to articulate what the future might hold, design thinkers often let go of leading a conversation with carefully articulated words. Instead they use the power of design, wild ideas brainstorms and very low-resolution, low quality sketches (stick figures even) of new realities to release boundaries on a challenge and permit creative and integrative thinking.

***Accessible Communication* -** A third key facet of design thinking is visualization to make complex ideas accessible. While ethnography seeks to describe a particular topic authentically and fully, design thinking— with it's focus on the future and opportunities for problem solving- can distill a description down to the essential elements that are launching points for action. With the tools of information and communication design, design thinkers have the ability to make complex thoughts and new realities incredibly accessible. The old adage, "A picture is worth a thousand words" is powerful for design thinkers. And design thinkers might push that further believing that one well captured, well-illustrated story is worth a thousand pictures. Visualized stories describe findings in a way that is more accessible to a wider audience than whitepapers. When working in the world of education, it was key to reach out to a diversity of stakeholders. It was also key to make the thinking accessible through a variety of formats and touch points.

Combining the careful study of people and culture, with the imagination of design, ethnography and design thinking together offer an opportunity for systemic problems to become more tangible and actionable. What ethnography does not offer, that WKKF

[5] While in this paper we are highlighting the integration of ethnographic approaches and design thinking, we must also point out that we integrate and build upon relevant pieces of other approaches as well. Our here regarding co-creation and collaboration also integrates and borrows from action research, cooperative inquiry, participatory design, and other related approaches.

needed, was a creative leap from the best practices and most inspiring stories into a vision of the future that could shape the path of early childhood education.

EXPLORING THE TOPIC

Our firm was asked explore the topic of early childhood education throughout the United States and to come up with a fresh vision for the future given four months and a team of four full-time and three part-time team members. Over the course of those four months we interviewed more than fifty different individuals that make up the ecosystem of education: children, parents, teachers, principals, community leaders, school board members, PTA leaders, home schooling educators, and expert researchers. We observed countless other individuals along the way. We conducted research in six states: California, Georgia, Michigan, Ohio, Florida and New Mexico. In addition to our relatively traditional fieldwork interviews and observations, we conducted ten collaborative work sessions involving WKKF, experts and other educators.

The first trajectory for finding opportunities in such a systemic problem was to start as broadly as possible and narrow as we learned. WKKF and IDEO agreed that focusing on early education was the only important restriction, but it was a new practice for WKKF to support a project that was so open-ended. But for this experiment on envisioning the future, they agreed that it was important to look for opportunities in all spaces of education in order to find the most inspiring ideas. Therefore we began with a very broad focus, and narrowed toward three key areas of opportunity along the way. This may sound fairly typical in good research design. However, the process of narrowing focus took place using distinctively designerly methods. We used sacrificial concepts to help indentify the most interesting and the most controversial areas.

At the beginning of the project, with our focus broad, we entered classrooms and observed everything, nothing was off-limits[6]: architecture of classrooms, standardization of texts, parent outreach programs, school organizational structures, school board processes. But fairly quickly, initial hypotheses began to emerge. One of the most important themes of our project was captured as a sacrificial concept. It first emerged in the following way.

One of the first teachers we interviewed described many of the obstacles he faced in his role as a teacher. This teacher discussed his commitment to bringing up the reading scores of

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[6] With the team assembled we began a small number of observations in classrooms to see teachers in action and interviews with parents and students. This helped us begin understanding the perspective from those most directly involved. We built empathy by attending public and private school events, talking with teachers about curriculum goals and school structures, and having interviewees map out the ecosystem of the public school and education.

all of his students, despite beginning the year with eighty-percent of his students falling well-below "proficient." He bemoaned mandated participation in "Academy for Success," a program purchased by the school to overcome their underperforming status with the No Child Left Behind act. Amdist all of his challenges, one moment grabbed our attention in particular. This teacher would inform parents about classroom activities via mobile phone text messages, because any other format was too often "lost". This interesting workaround for communicating with parents could have easily been overlooked amongst the teacher's frustrations with public school funding. But as our research continued, we were confronted by observation after observation pointing toward the difficulty of engaging parents in their children's education. This teacher's story of using text messages for outreach became a shining example of meeting parents where they are, with small bits of important, relevant information.

Spotlight on sacrificial concepts: prototypes make early hypotheses tangible – As we engaged in first steps out in to the field, stories like the one above about the teacher struggling to communicate with parents stood out to our team. Bringing to bear methods from design thinking, very early on in the project, we made our hypotheses about the future of education tangible. We drew sketches to imagine how key challenge areas might be resolved in the future. These informed the structure of our interviews and observations as we continued with fieldwork. Design thinkers typically refer to these as tangible hypotheses as concepts or prototypes. However, at IDEO, we refer to these radical, early stage concepts as "sacrificial concepts". We'll explain why.

Although it is a somewhat playful label, we find it is helpful to our design teams and clients to understand that these early stage concepts are distinctive from later, more well thought out concepts. Sacrificial concepts come from our earliest inklings, gut level inspiration, and informed intuition. However, they are by no means intended to be "correct." This lack of correctness helps in multiple ways. Firstly, we can work with our design teams to feel out the boundaries of a problem with the sacrificial concepts. If sacrificial concepts are intentionally radical, then design teams can pose thoughts that may get thrown out for being "too far out". But yet they also have an opportunity to share some fairly wild ideas and to see if there's a nugget of potential wrapped up in them.

This leads us to the second reason that sacrificial concepts are helpful. We take these sacrificial concepts and use them in interviews. We introduce them carefully toward the later part of interviews with stakeholders and use these concepts to get discussions of the future in to a more tangible space. It is always a challenge to talk with people embedded in a certain worldview about what things might be like in alternative futures. Sacrificial concepts, especially when presented in a more playful manner and explained as "absolutely not intended to be correct", provide an excellent means for helping participants to think about new realities in a more concrete way.

Thirdly, sacrificial concepts can provide an excellent way to introduce subjects that are challenging for people to openly discuss. Artifacts that are tangible and provocative help us ask the unasked questions, "Why not?" The visual image brings participants into a more realistic experience of the idea, in context, and often prompts a visceral reaction, that a simple interview question might not have. Sacrificial concepts can help people to open up and talk about topics they might have been more reserved on when only approached in conversation.

For example, in response to observations and conversations highlighting how challenging it was to engage parents in their children's education, we drew a few concepts around a theme of parent readiness.

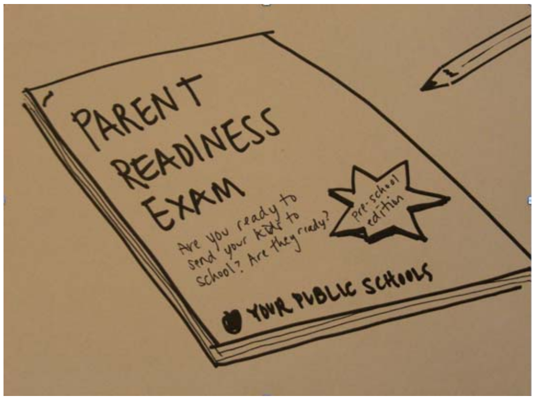

FIGURE 1 SACRIFICIAL CONCEPT
This early stage prototype brings to life one of the teams' hypotheses. This hand drawn sketch was utilized to provoke more future oriented conversations with stakeholders we met in the field. This concept shows how we began conversations and ideation about a controversial topic: parent readiness.

Sharing this concept in the field helped us to engage stakeholders in deeper and more productive conversations about alternative futures. For example, we found that many teachers were respectful and empathic when talking about the challenges they faced with getting parents engaged in the classroom. However, when showed a small group of teachers the sacrificial concept, it got a powerful reaction. The teachers opened up much more talking about their changing expectations and constant disappointments with parents.

The detailed responses against an extreme "parent exam" sacrificial concept helped steer us toward something more suitable. Instead of requiring parents to take a test for Kindergarten, our concepts evolved into a softer approach of designing ways for schools to treat parents as valued guests. The scenarios progressed to positively reward parents for their engagement with the school.

ENGAGING STAKEHOLDERS

If the first trajectory of our project was to start with a broad focus and get more narrow through techniques like sacrificial concepts, a second trajectory throughout the project is more counter intuitive. Typically research starts with a large group of participants in the beginning and narrows over time. Instead we started with a small set of interviews and observations, carefully chosen to represent extreme experiences in education. From there, we progressively engaged larger and larger groups of participants not only to observe, but also to collaborate, offer insights and co-create potential solutions. This process of gradually increasing the numbers of people we engaged finally culminated in a very open and easily accessible final report that was structured not as a final conclusion, but as a platform from which many other educators could start from to write their own grant proposals. This trajectory lines up well with the other moments we will elucidate below: collaboration and co-creation as well as making complex ideas accessible. In order to have the most impact, increasing the number of participants involved across the scope of the project was instrumental.

In the continuing months of the project, we traveled to WKKF sponsored and other programs around the country.[7] We also began engaging education experts and drew upon their wealth of knowledge and years of experience to understand issues that would have been challenging to access in our four-month window. From Steve Greely, president of the non-profit consultancy, Development Communications Associates, Inc., we developed a more nuanced understanding around underprivileged parents' feeling marginalized by the "system" of school. He has seen, over several years, that the programs that are most successful in engaging parents in a child's education don't feel like systems. A strong example could be seen in the program in Miami, where public school principals traveled to local pre-school programs to meet and greet parents in an environment where parents are comfortable. Steve's insights pushed our team to lean toward future experiences that would feel more like the rest of life, than like the school system.

Spotlight on Co-Creative Sessions: bringing perspectives together through design – When embarking on such large scale challenges, we believe that to collectively move thinking forward, not only the field work but also the analysis, and meaning making, and concept development must be collaborative and co-creative processes.

After completing the majority of our fieldwork, we used techniques for engaging stakeholders in rich dialog. In the middle phase of our project, we developed careful collaboration moments with the foundation, educators and other experts. We were careful to balance the depth we needed from these experts with our own abilities to look across

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[7] As we met with non-profit organizations is was important for us to refine our introduction. It is too easy for organizations to see us as evaluators, because that is the more common use of observation methods in schools. We created introduction letters with descriptions of the innovation work that IDEO takes part in, and made sure to emphasize that we are not experts in education, we are looking to each site for inspiration, seeing opportunity in the programs they are running.

industries and add breadth to a deeply entrenched issue. Crafting these co-creative sessions engaged experts in a way that was different from past conversations they were accustomed to. The work sessions felt like design studio experiences rather than academic conversations, even though the topics were similar. They were invitations to early childhood education experts to co-create with us so that we could move toward a common vision of the future.

In these work sessions, we highlighted key stories from the ethnographic style fieldwork, shared many of our evolving hypotheses, and evolved the thinking further. But the centerpieces of these work sessions involved a more future oriented creative activity. Together we visualized new futures and involved the design capabilities of our illustrators to bring these to life beyond words. For example at a work session with WKKF engaged educators in Miami, there were over fifty participants. Instead of hosting the normal kind of discussion they would have had about policy and programming, we invited them to brainstorm “wild ideas” to really help them “think outside of the box.” We worked with them to illustrate their ideas and bring them to life with simple drawings. In this session, the educators offered solutions they might not have considered otherwise. By creating an environment that felt more playful, and less weighty, these passionate educators were enabled to think more creatively, and they remarked on how refreshing the experience was.

FIGURE 2 COLLABORATIVE WORK SESSION ARTIFACTS
These sketches came out of co-creative sessions that involved brainstorming and facilitated sketching with education experts. These generative sessions helped to breathe new life in to old debates. While some concepts were more purely playful like regular parent-teacher Happy Hours, other concepts may have seemed radical at the time, for example letting companies pay for “product placement” in classrooms. Many of these co-created concepts later led to relevant and viable ideas.

COMMUNICATING THE VISION

Following a series of ideation workshops with education stakeholders, our core team shifted gears more extensively toward establishing our vision of the future, including solutions, visualizations and communication. Staying in close contact with WKKF and reaching out to more grantees, we used formative feedback sessions to continue narrowing our focus and broadening the stakeholders involved. From over forty storyboarded concepts, we looked across our selection for those that resonated most with our collaborators. We identified three major areas of excitement for the future of education in the U.S.: Engaged Parents, Empowered Teachers and Connected Schools. These became the areas in which we hoped to inspire action and add focus to the efforts of the foundation.

In order to be sure that our ideas were aligned with the goals of the Kellogg foundation, we created a single narrative for each of these three major areas and again held detailed review sessions with members from the client team. They were able to help us weave in and connect with important successes and best practices already in their programs. For example, they were able to call out that we could connect many aspects of the parent engagement program to success in the SPARK Ohio Parent Partners program, where paid coaches help parents of young children prepare for the skills of Kindergarten. This helped to ground our scenarios in real successes and provide educators with ways they could begin to take action beyond the narrative.

Spotlight on accessible communication: highly visual via multiple touch points – The core means to capture the future vision and share it with the WKKF grantees was a book. The centerpiece of the book is the three scenarios, which illustrate each major call to action and present a handful of specific concepts. These stories led the communication with lush illustrations and more emphasis on the perspectives of the individuals in the educations system (parents, teachers, school leaders) and less emphasis on the educational details. By engaging audiences with these stories, we were able to draw readers in to the vision. The illustrations were a deliberate choice to challenge assumptions that quality thought about education only comes in the form of long reports.

FIGURE 3 THE FINAL SCENARIOS

The final scenarios brought to life well thought out concepts through lush illustrations and narratives. The concepts around text messaging had evolved based

on teacher feedback to be include information about classroom learning, such as "remember to look at the stars tonight" rather than about continually up-keeping personal SMS communication.

Following each narrative and the concepts shared, we connect to information that would enable readers to take action. We supplied information about what could be done in the near term, long term and important issues to consider. The narratives encapsulate programs, products, services and communication strategies that are clear and actionable. Our main audience for the book would be community organizers and leaders who might take the next step of pursuing one or more of the concepts in their own community. We wanted to provide as much support as we could for this type of follow-through. For each concept, we included the type of information that might be asked for on a grant application. We described the key stakeholders for each idea, the opportunities and risks, the potential resources needed and the intended impact.

FIGURE 4 THE DETAILED CONCEPTS

In addition to providing engaging and easily accessible narratives to bring the concepts to life, the vision for early childhood education also provided helpful details behind each and every concept. These details included steps that could be taken in the short and long term as well as other programs to reference that had tried similar innovations. All of these details would assist educators with their own program designs and also with applications to the foundation for grant money.

Copies of the books were printed and made accessible to anyone who visited the website. Although the books with narratives and detailed concepts were the center piece of communicating the vision, we realized that we needed to make it accessible through multiple channels and at multiple levels to impact the largest possible audience. On the WKKF website, we offered a free digital copy of the book that they could download. Or if this was a challenge, they could request a printed copy, which would be mailed to them free of charge.

However, the book is heavy with detail, large format and expensive to print, therefore we also produced brochures for each of the three main scenarios to make a much lighter version of each narrative accessible. WKKF team members have used these as lower cost takeaways following discussions about their work. In addition, the illustrated human-centered narratives led easily in to a video format. We took the scenes of the narratives and created videos with voiceover so that the WKKF team members could present the stories in an inviting way, whether through email or in live addresses.

WKKF appreciated our emphasis on a tangible, actionable, accessible vision. Tony Berkley described it in his presentation of our work to the SPARK grantees, "We realize that coming up with provocative designs is actually not the hard part. The hard part is actually spreading these ideas to other funders, to systems leaders, to parent advocates and to other leaders who can actually adapt and adopt these designs in their own work."

We built upon our understanding gained from our ethnographic style observations. We created a vision and communicated it using tools from our design thinking approach. Together these mindsets created a powerful impact.

Conclusion: Impact and Learning

In the two years since this vision has been created and communicated, there are a number of means to assess success.

- ***Generating widespread interest in the initiative -*** Our first printing of the Tangible Steps Toward Tomorrow book included 250 copies for the foundation to give away. These were gone with in a few days. WKKF then printed 5000 more copies book. These have been given away by WKKF, including copies requested by President Obama's Transition Team and the staffs of the Governors of six states. In addition, thousands of additional copies of the book have been downloaded online. While the visual narratives draw in the readers, we found that the details developed alongside experts and the final concepts are what make the book feel useful for motivating stakeholders throughout the ecosystem.
- ***Inspiring further work sessions -*** In 2009, WKKF asked IDEO to take on another piece of work with influential members in the education space. Kellogg saw value in engaging thought leaders of the education community in dialogue around topics identified in the Tangible Steps book. The chosen topic for focus was parent engagement in schools. IDEO designed another large-scale, collaborative work session to spark dialogue and inspire action around this topic.[8]

Human centered design requires a new approach for WKKF and a new perspective for how they might approach their work with community organizations and experts more

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[8] The workshop also showed participants a way of framing challenges in a proactive and manageable way that compels action. The effects were different for each individual. One attendee felt empowered by the process of visualizing her ideas. She described her experience this way, "We've been talking about the educational philosophy of our new early education program. We've had good discussions, but nothing rockin'. [After the workshop] I suggested we draw images of student success and things went to another level!"

collaboratively. Berkley describes the outcome for his team at the foundation this way, "When we refresh our own way of working we see the benefits immediately. The level of engagement by our staff with IDEO's work has been through the roof."

The foundation has engaged with the content of their own work in a new way, one that is more about imagining future possibilities than proving past successes. While evaluation is an essential part of proving the value of philanthropic work, it was refreshing for the team to step out of their reviewer roles and help to construct ideal futures that combine several different methods and best practices, making leaps into the future, rather than careful moves.

Designing for systemic problems require new approaches for design thinking: tackling even broader problem spaces, creating new types of deliverables, enveloping enormous amounts of stakeholders, and discovering new ways to engage. Our participants do not have a framework for understanding designers, and it takes time to overcome the expectations that we are auditors. And perhaps most importantly, our clients are not the judges of success.

Both IDEO and WKKF have learned from the experience. Some key principles for approaching complex, systemic problems with design thinking could be:

- ***Tell stories rather than describe demographics –*** Our research revolves around the inspiring stories that come from individuals. Therefore we use stories and photographs to capture moments and emotions. Rather than typing demographic information into a report, we recite inspiring stories from memory.
- ***Start with inspiration, not a point of view -*** We were to look for opportunities in all spaces of education in order to find the most important ideas. Therefore we began with a very broad focus, and narrowed toward three key areas of opportunity as we learned along the way.
- ***Collaborate early and often -*** When embarking on such large-scale challenges, we believe that to collectively move thinking forward, not only the fieldwork but also the analysis, and meaning making and concept development must be co-creative processes.
- ***Provide provocations, don't be afraid of hard topics -*** In order to solve the challenges at hand, design thinking involves early prototypes or tangible, conceptual versions of what the future might be in order to help engage participants in imagining new realities.
- ***Offer actionable ideas and visions of possible futures -*** Combining the careful study of people and their actions through ethnography, with the imagination of design, and design thinking together offer an opportunity for systemic problems to become more tangible and actionable.
- ***Deliver engaging, accessible documents, not high-level reports -*** A key facet of design thinking is visualization to make complex ideas accessible. Design

thinking - with it's focus on the future and opportunities for problem solving - can distill a description of the present down to the essential elements that are launching points for action.

Principles like these, developed in the highly collaborative and stakeholder-rich environment of philanthropy, in turn have shaped our approach to business problems. They have helped us approach complex organizations like government institutions and other challenging business contexts such as conglomerates of for profit and non-profit organizations. We believe that ethnography can be instrumental at the very foundation of this contemporary economy and the global business community. But it must be combined with design thinking to incorporate actionable, tangible strategies to have deep impact.

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To download a free copy of the book, Tangible Steps Toward Tomorrow, visit:
http://www.ideo.com/work/featured/kellogg

Closing Keynote

Howard Tullman

WORKSHOPS
ROBIN BEERS (WELLS FARGO, USA) AND JOAN VINYETS (PIECE OF PIE, SPAIN), CURATORS

Social Shaping of Innovation

JACOB BUUR
University of Southern Denmark

ALEXANDRA MACK
Pitney Bowes

Why is it that some business proposals – no matter how well researched with users and business developed – don't seem to make it through the organizational jungle to become a real product, while others do? How shall we understand the innovative practices that we engage with our ethnographic work - in particular in a large corporation?

This workshop explores how innovation is socially shaped in organizations. Based on our experiences with practices around innovation and collaboration, we start from three proposition about the social shaping of innovation:

- Ideas don't thrive as text (i.e. we need to consider other media)
- Ideas need socialization (ideas are linked to people, we need to be careful about how we support the social innovation context)
- Ideas are local (ideas spring out of a local contingency, we need to take care in how we like them to travel).

Both the facilitators of this workshop have the experience of incorporating user studies and participation into the corporate research divisions of large, engineering heavy corporations, where "innovation" is valued, but incorporating users into the process has not always been well understood. We are currently collaborating on developing conceptions and techniques around an employee innovation program at Pitney Bowes.

We invite participants to share their own experiences by relating stories of how they engaged business colleagues or clients in innovating. We will introduce silent games as a way of 'modeling' collaboration in an organization. Thematically, the workshop follows up on discussions at two previous EPIC Workshops: 'Transforming Ethnographic Findings into Business Value' (Mack and Pierce 2006), and 'Cut it out in Cardboard' (Buur & Sitorus 2008).

This workshop is primarily intended for participants who have been struggling with some of these issues in their own companies, but should also appeal to consultants who must gain traction as outsiders.

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Focus on Emotions in Ethnography-based Research to Provide More Actionable Insights for Business Designers

CARL KAY
Marketing Communication Technologies, Daishinsha, Inc.

EIKO IKEDA
Marketing Communication Technologies, Daishinsha, Inc.

HIDEAKI SHIRANE
Marketing Communication Technologies, Daishinsha, Inc.

WAKAKO KITAMURA
Marketing Communication Technologies, Daishinsha, Inc.

This workshop highlights the importance of obtaining emotional insights from ethnographic research to provide business designers truly empathic and user-centered insights that improve the chance the designers will succeed in developing new products, services, businesses and brands that meet users' deep goals. Daishinsha's experience as a practitioner firm is that emotion behind users' behavior, including unexpected behavior, can be a powerful source for innovation. Insights into the users' subconscious, addressing questions such as "What he wants to be" or "How she wants to feel" in the context of products, service, business model or brand, help designers work faster and more successfully.

However, delivering those key emotions to design/planning phase is not always easy. In observational research, emotions are implicit and difficult to capture compared to visible behaviors. Ethnographers need to guess the user's subconscious emotions and their meanings from observed behaviors. Thus incorporating input about the user's emotional experience into the insight gathering phase is critical. This workshop will give participants the experience of seeking insights from a video of the behavior of a Japanese user in a daily setting and then repeating the process after also viewing an in-depth interview with the same user which provides much greater insight into the user's "emotional goals." We will compare the themes we develop in the hope of showing that considering the user's subjective viewpoint allows us to deliver superior input to the design stage. When designers are able to ask and answer "For whom are we designing?" their ideas will become more target user-oriented, which improves the chances of success in their work.

Workshop Overview:

A) Research Simulation #1- Observational Research
Facilitators will show a short video of ethnographic research of a Japanese user in a daily life situation related to a business category. Participants will work in small groups to list the insights found from user's behavior and exchange ideas about a theme to propose to designers for a project related to the business category.

B) Research Simulation #2 – In Depth Interview Participants in the same groups will then watch a video of an in-depth interview about the same theme, which focuses on bringing out the user's thoughts and feelings by using pictures and clippings.

C) Definition of Emotional Goal and the Mission of Service/Product
Participants will pick out the key emotions which are important for deciding a theme for the project, then collect insights relating to those emotions. We will define the user's high level emotional goal and the functional outcome that the user expects after using a product or service to achieve the emotional goal.

D) Emotional Design and Idea Assessment
Following the definition of the emotional goal and the functional outcome, we will discuss possible ideas for the project theme to present to the designers. We will compare those ideas to those we prepared for designers in Step A. Discussion about the Pros and Cons of setting the emotional goal will follow.

Our target audience is corporate ethnographers, designers, marketers and strategists who have a strong interest in using findings from ethnographic research for planning mid-to-long term brand strategy or starting new businesses. By focusing on "how does he or she want to feel" we will help designers create more practical and actionable plans.

From Research to Service

MONICA OROZCO
Insitum, Mexico

ROBERTO HOLGUIN
Insitum, Mexico

For the first time in our careers we all are facing the same trying situation across the world. We believe these times don't call for us to do something radically different. We believe what we do is valuable. What needs tuning is how we interact with our clients (internal, external, etc). We need to revisit how, when, to whom we provide value.

This workshop is not about improving our work, our methods. It is about how to make our work more significant. It will explore our role as service providers of research. We will together describe our process and discover common issues and new opportunities.

The approach is probably familiar, in this case using methods and techniques borrowed from "service design". From a distance it would seem that there is nothing new to this approach. What is novel is its application to our own discipline, using our own medicine if you will. EPIC provides a unique opportunity to take advantage of the collective presence of the group and address the issue of how to remain or become more relevant to those that we work for.

We aim to address what has been said before (by us, actually, last year), that no matter how good the research you do if it is not seen, understood, applied it might as well not have been done at all. This workshop is about that – about service. Delivering what we do in as many forms, directions and interactions that can be valuable to our clients (and ourselves).

The workshop will give us all the unique opportunity to revisit our concept of service and together describe (co-create) an experience (service) of what we provide. It will give us all the opportunity to discuss our daily practice, analyze and find outstanding solutions for a better and more apt role in the world today and tomorrow.

The Mobile Revolution: Using Technology to Transform Fieldwork

PATRICK LARVIE
Google Inc.

JENS RIEGELSBERGER
Google Inc.

OLGA KHROUSTALEVA
Google Inc.

YELENA NAKHIMOVSKY
Google Inc.

This workshop proposes a different take on the 'mobile revolution', the proliferation of internet-enabled mobile devices. Rather than looking at these devices as new opportunities for design and product strategy, we will discuss and explore in practical exercises how they can serve in overcoming two classic problems of applied field research: data paralysis and diary fatigue. We'll engage workshop participants in a sample data collection task, to experience first-hand some of the tools we'll evaluate in the workshop. We'll also analyze data collectively, so that workshop participants can try their hand at a few techniques for making practical use of multiple data streams.

The proliferation of portable internet-enabled devices poses a challenge for ethnographers, and meeting this challenge is central to our role as researchers in an applied technology setting. The very concept of the field has to be flexible enough to contain communities, symbolic systems and relationships that may not be in any way apparent to an observer who is physically present in the field. Our research participants may be twittering away while engaged in other tasks. We must develop methods that allow us to understand and explore multiple layers of interaction, and to effectively capture the meanings of these various forms of engagement, whether mediated by technology or not. This problem is not new to researchers, and it is not peculiar to technology users, but as our research often focuses on the ways that communication devices mediate social interaction, the proliferation of new devices and services gives this problem important new features.

This proliferation of communication devices also offers us opportunities to change the way we approach field research in some very pragmatic ways by reformulating the ways we collect data. When field research is re-framed to take into account multiple layers of social interaction, the result can be a proliferation of data streams that can be difficult to manage, let alone interpret, especially given the compressed time frames we face in applied research settings. It is easy to become lost in the data, particularly when we lack clear signals that allow us to know not only what is happening, but what kinds of meaning participants ascribe to their layered interactions. What does it mean when someone uses an instant messenger in a business meeting? How do we understand virtual social networks in the lives of people who continue to prize and value face to face contact above all else? Given the potential for so many layers of interaction, simply filtering signal from noise becomes a real challenge.

Traditionally field researchers have used paper, or more recently, online diaries to help participants record events that could not be observed. Diaries serve important purposes in applied field work. Often, the focus of our research involves events that are either too infrequent for us to observer, or are of a nature that the very presence of the researcher would interfere with what we're trying to understand. Additionally, we employ diaries as a method of sampling ranges and types of experience, helping us learn more about a domain prior to our physical arrival in the field. To be effective, diaries rely on the continued engagement of our research participants, which we also recognize to be one of the weak points of diary usage. We often find ourselves relying on these self-report diaries for lack of feasible alternatives – despite suffering, just like our participants often do, from diary fatigue.

In the workshop we'll demonstrate how some new mobile communication tools and can fit into field research in ways that not only help us re-conceive the task of participant observation, but also help us reduce the strain on both participants and researchers.

More specifically, the workshop will focus on three classic problems of diary-based field research:

- Data paralysis - researchers who end up drowning in their data because there is too much to analyze effectively;
- Diary fatigue - difficulties getting people to participate in meaningful ways;
- Collecting data in ways that allow us to see layers and types of social interaction.

This workshop proposes to put new technological tools into the hands of field researchers, to let them re-gain the richness of the field experience without being overwhelmed by multiple and potentially conflicting data streams.

We will introduce participants to some of the technological innovations that can help us re-think the field and their approach to data analysis. These will include diary capture methods involving SMS messages, voice recordings with transcription, and mobile image and video capture, among others.

Prior to the workshop we invite workshop attendees to act as 'study participants', documenting their EPIC 2009 experiences using some of the light-weight mobile capture tools. In the workshop we will then jointly analyse the data and we'll close by evaluating the tools, both from the point of view of the 'study participants' and the 'researchers', gaining insight into the possibilities they open to us and their limitations.

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Bringing Back Better Video From The Field

NAN BRESS
Docnography

In recent years, video has become more important to clients as part of the final report. Consequently, there is an implicit requirement for qualitative researchers to keep pace with improvements in video recording technologies and techniques. Led by a PBS documentary filmmaker who also has 10 years of experience as a corporate video ethnographer, this workshop is designed to bring production tips to ethnographers who want to improve the visual look and sound quality of their fieldwork footage. It also provides a rare opportunity to view sample videos from other corporate ethnographers (who have granted one-time permission to screen clips to workshop participants). The target audience includes qualitative researchers and ethnographers who are currently shooting their own footage (or wish to do so in the future) but have not had formal training in video production.

PART ONE: POWERPOINT PRESENTATION WITH VIDEO CLIPS AND HANDS-ON DEMONSTRATION/EXPLORATION OF VIDEO AND AUDIO EQUIPMENT

This is the "Documentary 101" portion of the workshop with instruction on technical and production aspects of video ethnographies. Topics include framing shots, using natural light to full advantage, the "rule of thirds" for video composition, ideal microphone placement for recording optimal audio, and shooting techniques to provide maximum flexibility in the field while also recording high quality footage. Video clips include "Low Impact Set Design/Art Design in the Field;" "Scene-Building" editing demonstrations, sample clips from international corporate ethnographies and documentaries; samples clips demonstrating formal interviews, action interviews, group interviews, webcam, observational footage, stylized footage, b-roll and voice over, longitudinal ethnographies, sound design, text/inter titles, and montage. Hands-on demonstration will feature a variety of standard definition, prosumer, consumer and high definition cameras, and a variety of audio recording devices including professional shotgun camera-mounted microphones, wired and wireless lavaliers, and consumer microphones.)

FIGURE 1 Stills and video clips augment instruction on camera placement, framing, optimal use of natural light, portability strategies, dynamic camera angles, and sight lines. "Scene Building" instruction attempts to address a common weakness in video ethnographies, namely a lack of "coverage," in which the ethnographer neglects to gather enough close up, wide shot, or illustrative footage of the field environments.

PART TWO: VIDEO INTERVIEWING WORKSHOP

Pairs will interview each other on camera with lavalier microphones. (Participants are invited but not required to bring their own cameras, microphones, tripods, and samples of their own footage; or participants are welcome to come alone without any equipment or sample footage). This provides an opportunity for the ethnographer to experience the role as respondent under the camera's gaze. Then workshop participants will switch seats and the respondent will become the interviewer behind the camera. This exercise provides that opportunity for feedback on one's interviewing and listening style, thus initiating a discussion into the "Economy of Attention."

FIGURE 2 "Hands-On Demonstration/Exploration" of standard definition, high definition, prosumer, and consumer cameras, along with a variety of microphones, allows workshop participants to test out new equipment. We will include guidelines for finding the right audio device for each camera depending on each ethnographer's style of recording.

PART THREE: GROUP DISCUSSION

Given that many corporate ethnographers work in relative isolation, this workshop will provide opportunity to discuss technical and stylistic approaches to field work with the other workshop participants. Topics may include workflow strategies, technical challenges, preferred equipment, eye contact, note taking, time code, mirroring, momentum, non-verbal affirmations, disclosure, editing strategies, topline reports and deliverables, and integration of the client into the field of research. We will also screen video clip selections, if available, from other workshop participants.

FIGURE 3 "Group Discussion" allows workshop participants to share production tips and footage with one another.

Goals and Key Benefits

It is my goal that participants will leave the workshop with: specific, actionable steps toward improving their audio and video footage; a better understanding of lighting, composition, "set design," and "shooting to edit" in the field; new strategies to capture essential "b-roll artifacts" in respondents' environments; new insights into "the economy of attention" through the video interviewing workshop; helpful anecdotes from peers during the group discussion; and a "wish list" of upgrades for camera and audio equipment.

Web resources

http://www.docnography.com

FLY ON THE WALL - USING DIRECT CINEMA ETHNOGRAPHIC FILMMAKING TECHNIQUES TO COMMUNICATE INSIGHT

BRUNO MOYNIE
Monde Moderne

The use of video in ethnographic market and design research has become commonplace in industry. Most of us have conducted contextual research using a handheld digital video camera and spliced key footage together into a research video or series of video clips to show our clients in the boardroom as part of a final presentation of research findings and recommendations. We're all filmmakers, right?

Not quite.

Film is a powerful medium for communicating deep and nuanced consumer/ user/corporate/societal insights. Ethnographic films produced in the tradition of direct cinema have the ability to speak for themselves; the film becomes the report. In the spirit of ethnography, direct cinema ethnographic filmmaking embraces an open research attitude and methodology. Willing to receive, accept and highlight even the most unexpected or contradictory insights, it may leave as many questions as it answers.

The workshop

Too often, the films we share with our clients are no more than video confirmations or illustrations of what a predictive research formula has already expressed in a more traditional form. In this way, video ethnography can easily become no more than a "hip" way to re-package the same stories our clients have been telling themselves all along.

To be successful, the businesses and organizations of the future will have to embrace complexity and contradiction and be open to change. As ethnographers practicing in industry, we need to bring to our clients the unanswered questions and the paradoxes of human behavior.

Direct cinema ethnographic filmmaking is a vehicle you can use to achieve this.

This workshop is designed to give participants a background in "observational mode" filmmaking. It will also provide them with traditional and applied examples of this approach to video ethnography, and send them away with specific techniques they can use when designing and executing their next video ethnography research project.

Userdriven innovation of future hospitals: a fictive workshop with patients and relatives

TINE PARK

LOUISE BUCH

Brainstorming the future from the present: beyond the horizon

WENDY MARCH
Intel Labs

KEN ANDERSON
Intel Labs

A workshop to explore and compare methods for projecting ideas for everyday life into the future. We are looking for ways to provoke and inspire new concepts for ten years out or more while keeping a strong sense of familiarity. The workshop aims to bring together ideas from all participants.

OVERVIEW

In Intel, People and Practices Research is the group that understands people. We are the group that people ask to help them understand what people are really doing in their lives, both with and without technology. This translates into "usages" in Intel parlance, and quickly moves from the present into the future. Many researchers that work in a product environment are focused on the future, but for product development this a short-term future, just a couple of years away. We are asked to lead and participate in brainstorms and other activities that attempt to construct further futures and to answer the question "what will people be doing in 2015, 2017, 2020…?"

Our larger organization has recently become "Future Technologies Research" and we are thinking even more about how to talk about the future. Talking about the near-future is simple – we assume a number of constants. In fact, participants in these sessions often sleep walk through them focusing only on the products developed, as if the rest of life will be the same. Alternatively, they imagine all problems related to their products or strategies are solved. Our challenge has to been to wake these "sleep walkers" to substantially different challenges and opportunities than we may face today. We've used techniques to get people actively engaged envisioning richer futures and importantly making plans on how to get there. We have been trying to find new ways of projecting into the future together with designers and engineers – how can we propose futures that are realistic to peoples' lives, but which serve to inspire and provoke? We have combined techniques from ethnography and methodologies from design to new ways of creating personas and forms of them for imagining 2014, and are experimenting with scenario planning. Successfully looking at the future surfaces the internal models of the future that have been ignored, repressed, or deliberately kept from view, and attempts to understand how they play out and how they came to be. At the same time, future work builds new models that help liberate us from dangerous corporate inertia and help corporations be more effective in thinking about and acting on the future.

In this workshop we will share, discuss and experience tools and methods for projecting into the future. We will present examples of the work we are doing, and hope that other participants will also bring examples of their own practices and techniques.

Key Questions:

- How do you keep the future real?
- How do you design for a boring future?
- How do you project far enough to move beyond the very realistically today?
- How do you create future props?
- How do you make ethnographic interviews into future maps?
- How do you keep participants in the future, not present tense?

Structure, Activities and Goals:

The workshop will focus on sharing, explaining and brainstorming methods for creating and projecting the future. Participants will share experiences about challenges, obstacles, techniques, and tools:

- Examples of methods from PaPR
- Other participants will share their methods
- Small group discussions around 4 selected methods

Personified Segmentation: Fusing Qualitative and Quantitative Evidence

CHAD R. MAXWELL
Razorfish

BARI WIESELMAN SCHULMAN
Razorfish

As researchers, we must continue to think of innovative ways to be increasingly quick and more nimble with our approaches and more transparent with our methods and analyses to teams, projects, clients, and the bottom line. And, perhaps most of all, we must continue to demonstrate our value and clarify our relevance in this ever-changing business and cultural landscape. Personified Segmentation is a methodical approach that helps us achieve these requirements and goals.

Personified Segmentation is a persona development mechanism that provides research longevity and high client value. The process (1) emphasizes the relationship between design personas and marketing segmentation, and consequently crosses the artificial divisions between qualitative and quantitative paradigms; and (2) is designed to be adaptable so as to balance rigor and the often-opposing needs of budget and project duration.

As demanded by our clients, Personified Segmentation takes a holistic, and, significantly, data-driven approach. As with traditional personas, we investigate the relationships between people, objects, behaviors, and attitudes, but we also translate those field findings into hypotheses and variables for statistical testing and modeling to form a powerful composite design tool.

The approach has four phases: Gather, Discover, Test and Measure, and Construction and Socialization. These phases enable us to make incremental and systematic progress toward building a robust, measureable, rich, and actionable understanding of our consumers. The outputs of Personified Segmentation are contextualized personas that are quantitatively fortified. Contrary to some traditional personas, Personified Segmentation relies more on multiple lines of evidence and testing than description alone. They are constructed through a cross-disciplinary effort between Creative, Consumer Insight, User Experience, and Strategy teams; and build a foundation for marketing and experience outputs.

During the workshop, we describe the Personified Segmentation approach, detail each phase of the process, work through several examples as a group, and discuss issues related to the application, utility, and long- and short-term benefits of the model in our own work and in the work of those attending the workshop.

Self Documentation 2.0: The Benefits and Challenges of Practicing Self-Docs as an Online Methodology

MICHELLE CURRY
gravitytank

CAREY STANSBURY
gravitytank

SHELLEY SATHER
gravitytank

AMY CLARKE
gravitytank

There is an opportunity to use the technological devices and tools at our disposal to evolve and reinvent self documentation. By employing web-based self-doc tools, we can shift into another key set of benefits: Data uploaded to the web is sharable in nature and can create transparency as they engage clients in the process. They enable more real-time communication between researcher and participant, creating the opportunity to probe for further insight. Further, the growing presence of mobile technology enables people to be 'untethered' for the first time, giving them (and us!) the opportunity to engage with this methodology in a highly mobile context.

This workshop will explore the frontier of web-enabled documentation tools, a world where there is much to learn and explore. We'll support an active and collaborative session, facilitate a mobile journaling exercise that engages attendees in the online self-doc experience from both sides: researcher and participant.

Ideate, Create, Change: From Insights to Innovation, Getting Internal Buy-in for Action

GAVIN JOHNSTON
Two West

LOU THURMON
Two West

RYAN McNEIL
Two West

In the current economy, many ethnographers are struggling to remain as part of their clients' business equation as companies search for inexpensive, quick solutions to their business needs. The problem is, obviously, that quick fixes rarely work when discussing the complex issues ethnographers tend to uncover. The workshop is meant to provide ethnographers and the people they work with tools to turn ethnographic insights into innovation, ensuring that the insights you captured turn to ideas that result in actionable and profitable business plans.

Using a case study format, participants will work in teams to move from findings to developing a model of "what's going on." Participants will then apply clustering, scenario planning, and inductive reasoning techniques to generate tangible marketing, development and design plans. Finally, participants will be introduced to tools for obtaining acceptance and internal buy-in from clients.

WORKSHOP DESCRIPTION

Developing a good idea is just the beginning when applying ethnographic findings into new products, messaging systems, etc. To remain relevant in harsh economic time, findings need to align with overall business strategies. This means developing techniques for collaborating with a wide array of people in the business, translating ideas into language they can readily implement, and affecting organizational change that results in metrics validating the value of ethnography.

Ideate

The workshop is meant to provide ethnographers and the people they work with tools to turn ethnographic insights from intelligence to innovation. Using case study data and role-playing as a starting point, participants will work to align ethnographic data with business needs. Working in teams, they will define the right ethnographic questions and how they correspond to the business questions. Key elements of the research will be mapped to appropriate business teams and high-level business strategies. We do this by focusing on techniques identifying frames, not just sensational points. Participants will then use individual and team clustering techniques and strategic frame boards to align cultural themes with specific business needs.

Create

Once business insights have been identified, workshop participants will begin learning facilitation and brainstorming techniques to develop creative business concepts. Through hands-on practice, participants will develop skills in structuring ideation and rapid prototyping sessions. Techniques such as cluster analysis and story-line development will give cross-functional teams tools to develop and refine ideas, brainstorm product ideas and/or application, brainstorm creative execution, execute creative direction and prototype solutions and of course a list of macro and micro business metrics for the client to monitor.

Change

Presenting a framework of how your work will impact your clients organization internally only strengthens the probability of your work coming to fruition externally. After workshop participants have refined their insights into actionable business ideas it's time discuss the reality of pushing your work through your clients business. Learning the basics around the psychology of change will allow participants to co-create messaging for the presentation of their idea to decision makers. Through the application of basic change management techniques participants will learn how to aid their clients in integrating their business ideas and ethnographic insights through the client's organization. Working in teams, participants will learn how to break down their clients organization on a macro level and devise a plan of action that can be handed off to internal stakeholders for refinement, application and measurement.

The goal of the workshop is provide techniques and tool ethnographers and other team members can use to gain the most value from research findings, and see that value implemented and measured. At the end of the workshop, participants will walk out with a toolkit of skills they will be able to immediately use to translate insights into action and gain real buy-in from all members of the organization.

Having an Impact: Moving from Data to Insights to Opportunities

STEVE PORTIGAL
Portigal Consulting

The goal of this workshop is to provide an experience in working with a framework that maps a process from data gathered in ethnography through to insights and then to business opportunities. By conducting observations together we will work with actual data to think divergently and generate a broad set of possible concepts across many different business areas.

We will tackle a specific problem: the design of a new flagship retail location, and we will take advantage of the Chicago location on the Miracle Mile to briefly immerse ourselves in that environment for our observations. Participants will work together in the field and in collaboratively brainstorming and ideating.

Research Under Pressure: New Approaches for a Changing Economy

KELLY COSTELLO
Doblin, Inc., a member of Monitor Group

DON DEROSBLY
GBN, a member of Monitor Group

JESSIE GATO
Doblin, Inc., a member of Monitor Group

OVERVIEW

Peter Drucker made this optimistic comment about change: "The entrepreneur always searches for change, responds to it, and exploits it as an opportunity."

While this may generally be true, nothing puts a damper on entrepreneurialism more effectively than a good old fashioned recession. The potential for lost opportunity is, of course, especially high during periods of economic transformation. Exactly as markets, industries and economies are being re-structured, many entrepreneurial companies hunker down, focusing on strengths and cutting costs rather than embracing change as the mating ground of future growth. How do we leverage the convergences of a tumultuous marketplace and anxiety about the future, to craft meaningful strategies and research programs that help companies capture the future?

APPROACH

We will use a pre-existing set of economic recovery scenarios developed by GBN--the global leader in Scenario Planning and the world's largest dedicated scenario consultancy--to explore areas of current market, industry and product opportunity. More specifically, we'll exploit the scenarios to creatively identify the primary drivers of growth over the next several years. Through an engaging set of interactive exercises, participants will explore critical uncertainties surrounding current economic and competitive shifts, and then build a plan for addressing these. This set of questions will guide the conversations about the scenarios we will discuss.

- What will success look like in each scenario and what kinds of companies are best situated to capture the opportunities?
- What capabilities would your firm most want to have in each future scenario?

- What markets and which customers will you serve in each scenario?
- What key questions need to be answered in each scenario? Where will you seek the answers?
- What kind of 'leading indicators' would you want to track to determine if a particular scenario were going to come true?

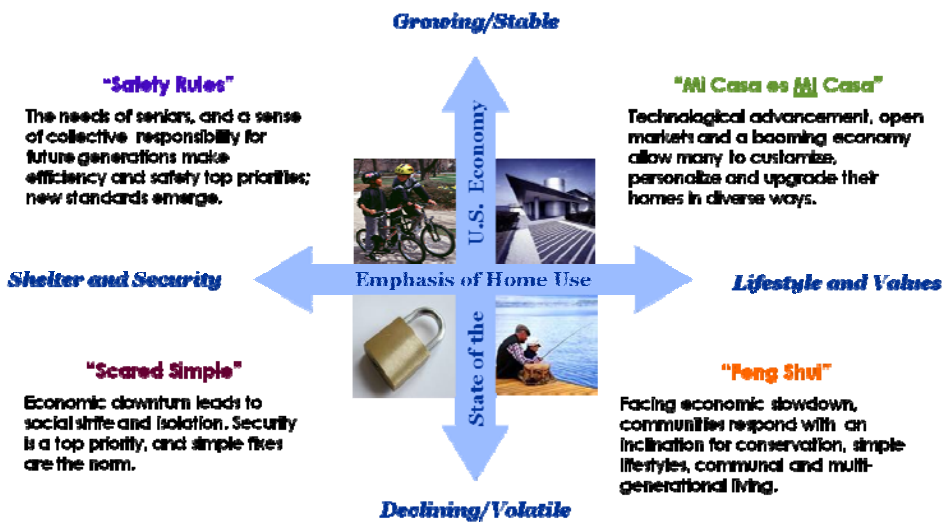
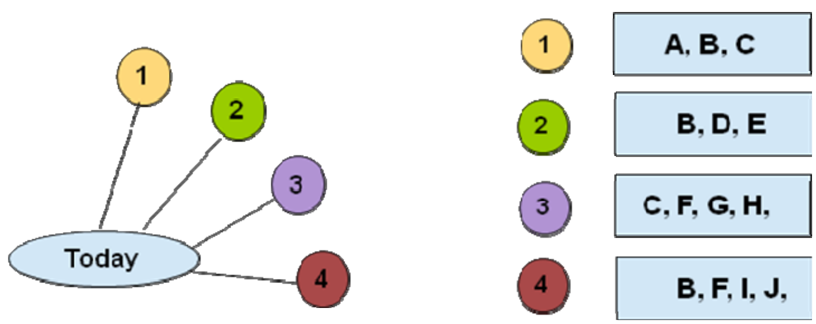


FIGURE 1:



Proposed scenarios are assessed for plausibility and broad

Revised scenarios are mined for options, strategic choices, and research plans

FIGURE 2: TWO PHASE ANALYSIS

GOALS

We will work collaboratively to generate:

1. Greater appreciation of implications and options in each scenario
2. Enhanced understanding of market and industry trends in each scenario
3. Itemized lists of differentiated capabilities in each scenario
4. Consumer insights in each scenario

STRUCTURE

The session activities include the following:

1. Overview: outline workshop objectives define Scenario Planning
2. Explore Options: small groups review, discuss, and reorder scenario components to create refined scenario sketches.
3. Scenario Thinking: review detailed scenario stories, paying attention to likely events, leading indicators and headlines researchers might expect if a given scenario were evolving.
4. Identify Issues: small groups explore how important issues (e.g. strategy choices, organizational issues, risks and opportunities) play out differently across scenarios.
5. Craft plan: Small groups devise a research program to build a deeper understanding of the future options in each scenario.
6. Combine Learning: discuss insights, questions, priorities, perspectives and potential directions emerging as a result of the scenario conversations.

BENEFITS

The workshop provides a great opportunity to explore the use of Scenarios and Scenario Planning in framing a client's situation and in envisioning the many different research avenues, options and choices which different visions of the future create.

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Analysis and Synthesis for Design: An Elephant Surrounded by Blind Men

JOHN PAYNE
Moment Design, Inc.

Analysis and synthesis are critical to the application of observational research techniques in a design context, yet are often underrepresented in literature and discussion. What discussion there is often centers on execution of individual methods and practices and the benefits they provide. These in-depth explorations of individual methods are invaluable to us as practitioners, but mastery of any individual method does not lead to mastery of the analytical / synthetic process.

In this workshop, we will investigate the core purpose(s) individual methods serve, how they relate to each other and to the process as a whole. We will seek to establish and evaluate a strawman organizational model describing the analysis / synthesis lifecycle and the value of those activities through discussion of individual methods employed by our cross-disciplinary participants

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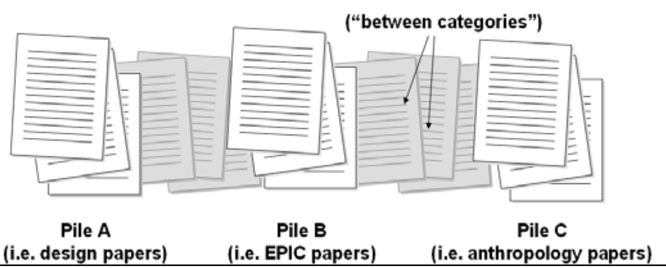
ARTIFACTS
ALEX TAYLOR (MICROSOFT RESEARCH, UK), WENDY MARCH (INTEL LABS, US) AND SCOTT TRENOVITS (GRAVITYTANK, US), CURATORS

OFFICE "CLUTTER" AS AN "INFOVIS SYSTEM" FOR VAGUE "CATEGORIES"

PETER COPPIN
Faculty of Information and Knowledge Media Design Institute, University of Toronto

Many offices contain so-called "clutter" (Kirsh, 2001; Malone, 1983). In my artifact submission, "clutter" takes the form of papers scattered throughout horizontal surfaces in an office. My submission consists of: 1) Real "clutter" transplanted from an office environment and 2) a diagrammatic illustration that models how the "clutter" serves as a information organization system that enables the "organization" of both vague and well defined categories.

I propose piles are theme based ("labeled") categories containing document-objects that fall along perceptually similar dimensions. Like a vague sketch, the relationships of document-objects between piles express relationships that do not easily fall within existing piles (easily categorized themes).



Using clutter as an organizational system.

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Grounding the American Dream: A Cultural Study on the Future of Consumerism in a Changing Economy

TRACY PILAR JOHNSON, Ph.D.
Context-Based Research Group

ROBBIE BLINKOFF, Ph.D.
Context-Based Research Group

In the fall of 2008, Context-Based Research Group conducted a cultural study on the impact of the economic crisis and what it might bring for the future of consumerism. As consumer anthropologists our goal was to document this critical juncture for our culture. As marketers, our goal was to illustrate how this cultural shift will impact our behavior as consumers. What Context saw during this research was a culture swept up in the early stages of a traumatic event. Clearly the American Dream was crumbling, but just as clearly, we saw a new dream beginning to take shape. Context has been tracking this new dream, documenting a five-step process that consumers are currently undergoing as they say goodbye to Homo economicus and emerge with a new consumer identity we are calling the Grounded Consumer.

THE GROUNDED CONSUMER

In the fall of 2008, consumers began a series of changes as they examined who they were not only as consumers, but as people facing a crisis. What the media referred to as an economic crisis, we at Context-based Research Group came to see as a much more profound cultural crisis. After spending time with people across the United States, in their homes as well as in the places where they shop, we observed that from this crisis a new way of life was emerging. This new way of life includes a new consumer identity that Context articulated through our analysis as The Grounded Consumer. Here at Context we believe a majority of consumers will undergo this five-step process and emerge in a grounded state. The five-stages are as follows:

Stage 1: The Realization: Goodbye *Homo economicus*
Stage 2: How Did I Get Here? My Life is Not a Loan!
Stage 3: Moving from a Me to a We: The Transition from a Me
Stage 4: unSTUFFing My Life
Stage 5: Putting it All Into Action: The Grounded Consumer

During the Artifacts Session Context will present the five stages, through text and pictures from the field, along with two short videos discussing the fielding of the study and the analysis process. We will also present clips and images of current advertising that represent the stages of becoming a Grounded Consumer anticipated by this study when it was first published in December 2008.

REVERSE ALARM CLOCK: DESIGNING INTERACTIVE PRODUCTS FOR TRANSITIONS

FATIH KURSAT OZENC
School of Design Carnegie Mellon University

JOHN ZIMMERMAN
School of Design, Human Computer Interaction Institute Carnegie Mellon University

Reverse Alarm Clock (RAC) is an interactive system designed with the purpose of helping young children stay in bed during the night. In the long-term, the RAC has the intentions of helping parents feel like they are becoming the parent they desire to be, and to engage children in learning to make good decisions. Field study showed that the RAC kept children in bed and decreased the time parents spent putting their children back to sleep after they woke up during the night.

Dual income families with young children are a growing population in the United States and Europe. While transitioning between work and home, these families encounter stress, life quality decline, and loss of life order. To address this problem, we designed an interactive system, called Reverse Alarm Clock (RAC), with the purpose of helping young children stay in their own beds during the night. RAC (Figure 1) achieves this by providing an abstract display of time that children can understand. The long-term goal of the RAC is two-fold. By placing the interactions within intimate bedtime rituals, it helps parents become the parent they desire to be. Moreover, the RAC supports children in learning to make good decisions (e.g., stay in bed) and creates an opportunity for the parent and child to connect through interactions with the clock.

The RAC has four elements, include Sky display, Treasure chest music box, Parental controller, and Sensorial bed. The *Sky display,* as the central element of the system, uses an abstract and relative display of time, a setting moon and a rising sun, to communicate to children how much longer they need to remain in bed. The *Sky Display* has three stages, bedtime, in-between, and wake-up. When the moon and star lights are on, it is *bedtime* and the child should stay in bed; when only stars are on, it is the *in-between* stage and the child can leave the bed; when the sun light is on, it is the *wake-up* stage and the child needs to get up and start the day. The *treasure-chest music box* lets the child select what music to play in the *wake-up* stage. The *parental controller* lets parents set the alarm times that determine when the system should shift between stages, and the *sensorial bed* detects the child's motions on the bed to trigger the *wake-up* stage, which rewards the child for her behavior and also increase her agency.

Based on the findings of an initial field study conducted with three families, we found preliminary evidence that the system keeps children in bed, and decreases the time parents spend putting their children back to sleep after they wake up during the night. This shows that RAC not only addresses the biological aspect of sleep (waking up), but also the social aspects, for instance, helping parents to soothe their child. Of the families included in the study, one enjoyed the system the most, where the child used it every night and the RAC was integrated in their bedtime ritual, while another family preferred sleeping with their child rather than using the product. These initial findings help us reframe the problem and reconsider the RAC as a system crossing multiple types of transitions, e.g., daily transitions between night and day, and behavioral transitions from co-sleeping to independent sleeping. This reframing opens up the problem space and leads us to develop a stance to design interactive products that facilitate people's transitions.

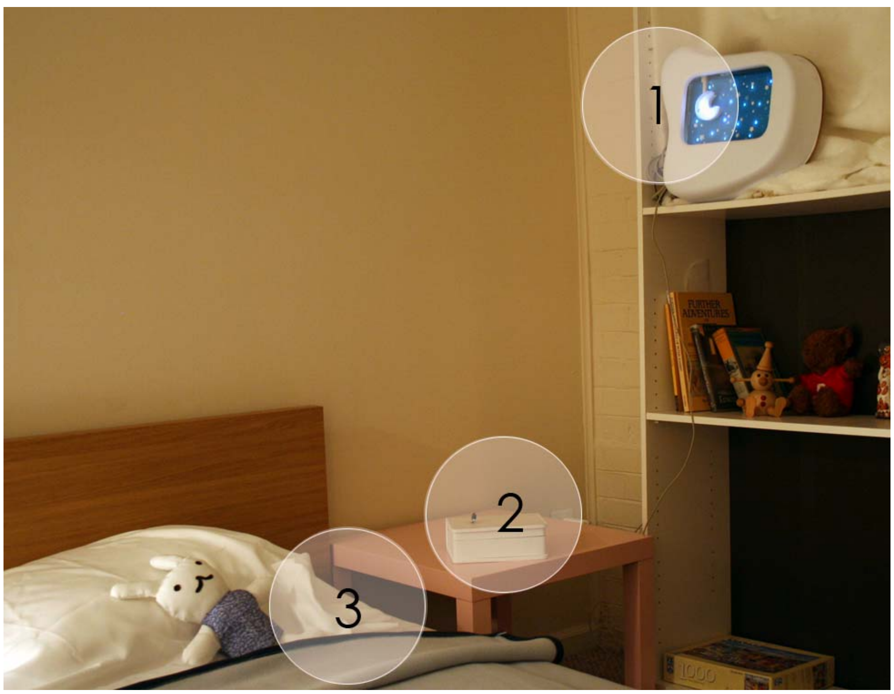


Figure 1: Reverse alarm clock elements (1) sky display, (2) treasure chest music box, (3) sensorial bed

Two Churns

ERIK PETERSON
University of Illinois at Chicago

The artifact I am presenting exists in the synthesis of two objects. There is a tension generated in the space between these objects, and the observer is implicated in constructing their meaning. Titled *Two Churns*, the objects consist of one aged oak barrel with a hardwood handle and one hemispherical Apple iMac computer with a stainless steel handle.

The first churn looks very much like an historic butter churn. Unlike a wine barrel, it sits vertically with the handle of the churning mechanism rising from the center of the top lid. Referencing an interpretive object at a living history site, the churn sports an "authentic" old-time logo on its side, a literal brand burned into the wood that reads, "I Cannot Believe It's Not Butter." The churn bills itself as an antecedent to the popular faux butter sold in supermarkets in plastic tubs and spray-bottles.

This wood-burned brand throws into question the familiar silver apple logo that is emblazoned upon the object next to it. The white body and metal neck of the Apple computer becomes a churn only in relation to its surreal sibling through formal similarities. Its screen removed, the computer's neck becomes a seductive churning lever, the activation of which now encourages material rather than immaterial transformation. When powered up the *Apple Butter* churn now turns cream to butter rather than 0s and 1s into <cream> or <butter>.

These churns exist within a double system of representation; they both are and are not churns. The patina of the wooden churn, hand-worked construction, and labor-intensive churning process evoke slower methods of production and material transformation that sharply contrast the culture of individually wrapped and industrially processed foods. Fake butter was not born in a churn. The Apple, on the other hand, is an artifact of sleek corporate product design, not a homesteader's ingenuity. A technology with a built-in lifespan, this particular machine is stripped not of its processing power but its means of transmission. Does a computer still churn virtual butter when no users may taste its creamy manifestation on screen?

This is a fat subject, but slippery too. These objects have thick cultural histories that can be envisioned on a technological timeline and whose veracity is embedded in their materials – wood, plastic, metal. The churns, however, are "artifactual": they slide between the realms of the factual and the artificial. Even when activated by the viewer's imagination, they can only pump fake cream into fake butter or virtual cream into visual butter.

Two Churns presents a pair of objects that are navigating a strange and futile search for identity in a world where they have become obsolete. The transformation of the objects' functions mirrors the turbulence of turning cream into butter. The *I Cannot Believe It's Not Butter* and *Apple Butter* churns are doppelgangers that echo each other's formal properties, but more importantly articulate a conceptual system of material flux.

Creating Ethnographic Liquidity with Printed Materials: Two Examples from Research on Ageing at Intel

SIMON ROBERTS
Intel, Digital health Group

DAVID PRENDERGAST
Intel, Digital health Group

"It is exchange that sets the parameters of utility and value, rather than the other way round, and exchange that is the source of value…Exchange is not a by-product of the mutual valuation of objects, but its source"
Arjun Appadurai, The Social Life of Things

For research to have an impact in any organisation it needs to be circulated so that the findings can be understood, conclusions discussed and the implications fleshed out by relevant stakeholders. It could be argued that research that does not travel through an organisation can only ever have limited impact, since it is on this journey that audiences can create for themselves a meaning for the research. However, the impact of ethnographic research in the context of large organisations, and beyond, can often be impaired by issues of circulation. Creating outputs that travel well is all important to developing what we call "ethnographic liquidity" – the ability of research to be converted into something of value by its audiences.

One of our own responses to this issue of liquidity has been to focus on high quality, printed material: booklets. These are used to draw together large projects: presenting ethnographic profiles, country overviews, and illumination of the analysis of the material. The booklets aim to provide content that will become on-going resources that diverse readers find useful (e.g., by including relevant statistics, demographic and market data). Our experience has been that focusing on materialising research in this way has allowed us to increase the liquidity of our work. Perhaps counter-intuitively, moving ethnographic material out of digital formats into paper can make it easier to circulate. Further, its existence in an organisation becomes more durable.

We will present two artefacts created by anthropologists in the Digital Health Group at Intel Corporation: the Global Ageing Experience (first printed 2007; reprinted 2008) and Community Supports for Ageing booklets (2009). These booklets, the result of long term ethnographic studies, summarise significant research programmes. The most recent booklet brings together into a coherent narrative, a diverse range of projects that might otherwise have received limited visibility. The authors of these booklets discuss what they have learnt practically in creating these 'liquid' documents and to share insights on the material itself with conference attendees.

The Global Ageing Experience Booklet, first published 2007. Reprinted 2008.

The Community Supports for Ageing Booklet. Published 2009.

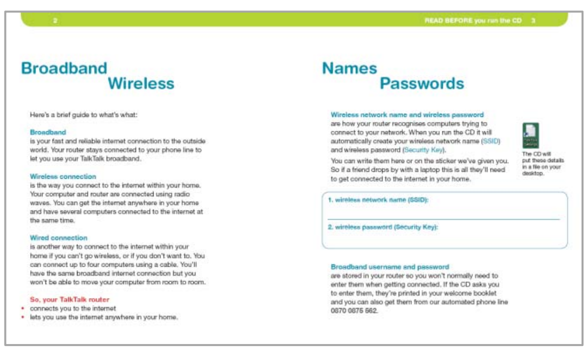
Drawing on ethnographic research to improve customer satisfaction and reduce operational costs

SIMON RUBENS
new experience limited

The research involved in-home observation of 20 customers setting up their broadband wireless router. The findings led to a number of key recommendations that are being implemented, including the need to develop a new set-up guide. The guide addresses key aspects of user understanding that can affect successful set-up and use of a broadband connection.

Most notable in our research was the finding that users have a very confused model of how they connect through broadband and wireless, and the difference between the two. For example, one participant who had set up wireless but not established a broadband connection described having 'internet in the home, but not outside'. This confusion can result in people connecting cables incorrectly and mixing up different types of password.

We developed the guide, around our research insights, to help users develop a clearer model of broadband and wireless, and so support setup and subsequent use. The new guide has now been implemented and data on customers' propensity to call technical support suggest it has been highly effective in reducing confusion and calls to the company's technical support line so improving customer satisfaction and reducing operational costs.


2

READ BEFORE you run the CD 3

Broadband
Wireless

Here's a brief guide to what's what:

Broadband
is your fast and reliable internet connection to the outside world. Your router stays connected to your phone line to let you use your TalkTalk broadband.

Wireless connection
is the way you connect to the internet within your home. Your computer and router are connected using radio waves. You can get the internet anywhere in your home and have several computers connected to the internet at the same time.

Wired connection
is another way to connect to the internet within your home if you can't go wireless, or if you don't want to. You can connect up to four computers using a cable. You'll have the same broadband internet connection but you won't be able to move your computer from room to room.

So, your TalkTalk router
- connects you to the internet
- lets you use the internet anywhere in your home.

Names
Passwords

Wireless network name and wireless password
are how your router recognises computers trying to connect to your network. When you run the CD it will automatically create your wireless network name (SSID) and wireless password (Security Key).

You can write them here or on the sticker we've given you. So if a friend drops by with a laptop this is all they'll need to get connected to the internet in your home.

The CD will put these details in a file on your desktop.

1. wireless network name (SSID):

2. wireless password (Security Key):

Broadband username and password
are stored in your router so you won't normally need to enter them when getting connected. If the CD asks you to enter them, they're printed in your welcome booklet and you can also get them from our automated phone line 0870 0875 562.

A spread from the user guide explaining the difference between broadband and wireless connections.

Blackness Defined

AUTUMN SANDERS
Savannah College of Art and Design

This information packet was developed for the Black Standards Society, a fictional secret society. The packet includes a personal letter, the organization's history, mission statement, and three letters to be sent on the society's behalf addressing issues such as black neighborhoods, rap music and black leadership. The organization was founded in the 1820s to establish a code of conduct for blacks as a way to bolster the abolitionist argument. Members reason that if blacks are exemplary citizens, their acceptance by white society is guaranteed.

Creating the imaginary Society was a way to respond to a survey examining how African Americans' varying definitions of blackness affect their treatment of blacks with a variety of experiences, especially then-Senator. Barack Obama. When the project was conceived, Obama was facing criticism on whether he was "black enough" to become the nation's first black president as he had no heritage connected with American slavery.

DESCRIPTION

On January 21, 2008, Barack Obama's political future was an uncertain one. He had won the Iowa Caucus. The victory showed the first-term senator as a viable candidate. But a win in an overwhelmingly white state didn't quiet the pundits, scholars and journalists who questioned whether someone without roots in American slavery was "black enough" to become the first black president. At work in the conversation was an unspoken definition of "blackness" that went beyond skin color.

That morning I attended Savannah's annual Martin Luther King Day Parade and surveyed 11 African Americans to better understand their definitions and categories of blackness. When asked to define blackness, most agreed it was a combination of skin color, upbringing and conduct. One teen placed high value on one's neighborhood.

Participants then arranged pictures of eight famous men in order from "least black" to "most black" and told where they would place themselves in the line. The exercise showed their definitions at work. The pictures were of hip hop mogul Russell Simmons, director Spike Lee, rappers Ludacris and T-Pain who both had popular songs on urban radio, former president Bill Clinton, L.A. Lakers star Kobe Bryant, Dr. King and then-Senator Obama.

The idea of blackness as a factor of one's service to and on behalf of blacks was a common topic among older respondents while teens scored more highly people they hoped to emulate. Perhaps because of the day Dr. King was always considered the most black. Six of the 11 participants listed Bill Clinton as the only person "less black" than Obama. The compiled ranking from least black to most black was: Clinton, Obama, Bryant and Ludacris (tied), T-Pain, Simmons, Lee and King.

In response to the survey, I created a fictional organization called the Black Standards Society. The group is a secret society founded in 1825 by freedmen in Boston. Its goal is to demonstrate the intellectual ability and social value of blacks so they will be accepted as full citizens. Over time the Society has become the arbiters of blackness. They are a form of government over the people, admitting only those who comply with their idealistic, elitist, and ultimately futile aims.

Because of his quick success, the Society is hastily inducting Barack Obama as a leader in their society. The artefact is the information packet containing his first assignment. He is to covertly send a group of letters on the Society's behalf. Each letter deals with a different issue that surfaced during the parade interviews. One woman is told her neighborhood is not on the list of approved communities. Another letter addressed to Jesse Jackson suggests deeper scrutiny of his actions because people are complaining that he isn't keeping his promises to help.

The actions of the Society reflect the judgment of blacks against one another. Implicit in questioning Obama's blackness is the idea that one's racial identity is a group decision.

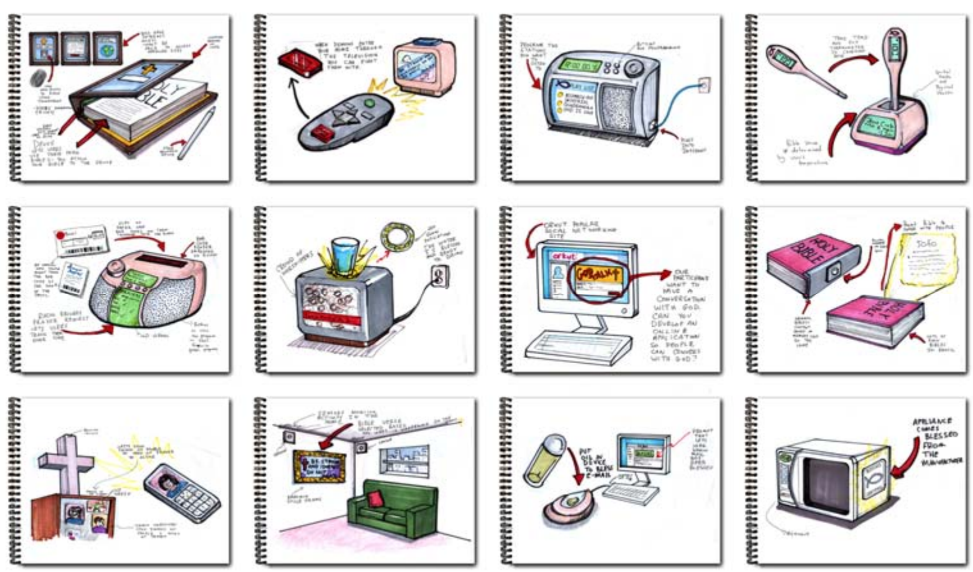
Designer's Sketchbook: Developing Technologies to Support Brazilian Pentecostals' Religious Practices

SUSAN P. WYCHE
Georgia Institute of Technology, School of Interactive Computing and GVU Center

CAMILA M. MAGNUS
University of Barcelona, Faculty of Geography and History

REBECCA E. GRINTER
Georgia Institute of Technology, School of Interactive Computing and GVU Center

We present a sketchbook of conceptual designs generated during a six-week qualitative study examining how Charismatic Pentecostals use Information and Communication Technologies (ICTs) to support their religious practices in São Paulo, Brazil. Imagining these speculative design concepts complemented our fieldwork in the following ways. First, sketching these design concepts helped us frame our research findings in material terms. Second, imagining material objects (not necessarily a realistic product) that a study participant might use to address a particular situation drew out practical factors that would affect ICT adoption and use. Third, responses to sketches of speculative design concepts sometimes led us to recognize the need for defamiliarization, or to question our assumptions about the local context of use. Finally, these sketches were useful in helping us overcome some the challenges associated with conducting research that involves acts of translation (e.g., Portuguese to English).



Interpreting culture through visual language

JOANNE MENDEL
Cheskin Added Value

JAN YEAGER
Cheskin Added Value

A digital story illustrates how semiotics, as a method of inquiry, is used to interpret evidence of behaviors in the culture by analyzing the narrative discourse that exists in visual media

OVERVIEW

Is hot chocolate masculine or feminine? When is it appropriate for men to drink hot chocolate? We illustrate how visual media is analyzed to interpret evidence of narrative discourse in the culture. The plethora of imagery available in the public domain is our raw material for identifying cultural cues. We take viewers through an analysis of hot chocolate using a visual language framework that reveals product attributes and characteristics, consumer behaviors and context for consumption.

A Rationale

As visual designers we have deep expertise in deconstructing and analyzing visual information. Using a semiotic approach we can apply this expertise to perform a role—as an interpreter of culture—that is commonly played by researchers. Our work in this area has included discrete explorations of specific brand iconography to thorough semiotic explorations of entire categories.

We believe our perspective on, and use of, this method of inquiry presents an opportunity to explore other applications of it with the larger research community who bring their own perspective.

SEMANTIC SIGNS

Our senses pick up on different signs that we assign meaning to based on our cultural ties.

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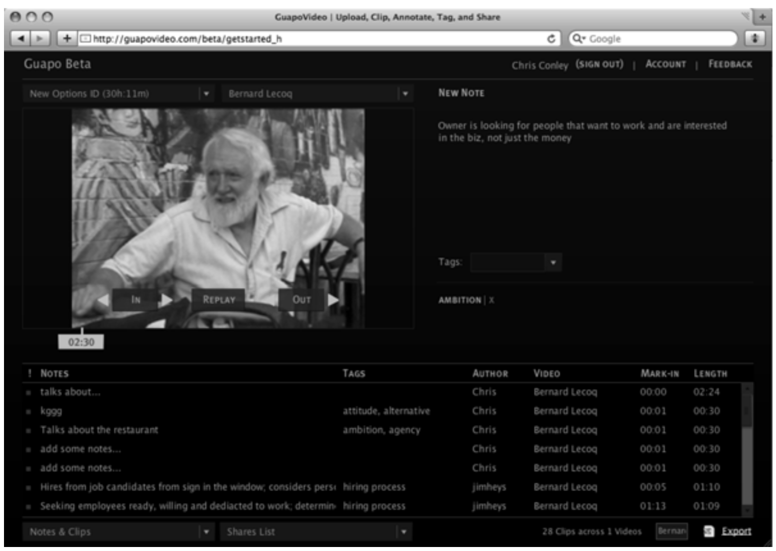
GuapoVideo.com: What Happens When Our Data is More Accessible & Shareable?

CHRIS CONLEY
LimeChile Productions, LLC

Guapovideo.com was built to liberate video research data from the desktop and make typical research video workflows readily accessible and easy to use. Early users of Guapovideo.com were consistently surprised with how it changed their relationship to video research. We are interested in fostering a dialog about what happens when our video research data is more accessible and shareable.



Main guapovideo.com interface

Consider the following questions:

1. What are your first impressions of such a capability?
2. What are the benefits and drawbacks of clients participating in analysis?
3. How can accessible video enhance or hinder your ability to make meaning and be effective with clients?
4. What is the evolution of such tools in ethnographic praxis?

BIO SAND FILTERS: Designing for the other 90% through an empowering enterprise at the bottom of the pyramid to accelerate the manufacture, distribution and diffusion of the filters into the African community.

AMIT BAPAT
Savannah College of Art and Design, Savannah, GA

This is an ongoing MFA research project conducted in collaboration with a Non Government Organization (NGO), Hope to One life in Uganda. The Bio-sand filter (BSF) is a primitive and inexpensive form of water filtration that uses beneficial bacteria and sand to remove contaminants from water. The filter has been in use for twenty years and is innovative in its functionality and technology. However, the bio-sand fails to address issues of ergonomics and usability. More importantly, its diffusion into the African community has reached a saturation point that is well below its potential. It is the purpose of this study to reveal the limitations in the design of the filter unit toward the end of creating a redesign that fosters a new production and service model. This model would increase the potential for diffusion of this important invention throughout non-developed countries.

If we stop thinking of the poor as victims or as a burden and start recognizing them as resilient and creative entrepreneurs and value-conscious consumers, a whole new world of opportunity will open up.

Prahalad, C.K. 2007 *The Fortune at the Bottom of the Pyrami*d. New Jersey: Wharton School Publishing

INTRODUCTION

The thesis takes an in-depth look on the issues surrounding the current product as well as the system in which it is placed. As seen in Figure 1, the current diffusion gap between innovators, creators, and users is depicted. Solutions for the redesign of the filter mold and filter unit are proposed in an effort to simplify and accelerate the manufacturing process. A look at alternative materials for construction will also be undertaken. On-site ethnographic research will be conducted to observe local users and gain insights as to how culture and conditions affect design. Full scale prototypes of the mold and filter will be constructed as the design is analyzed and followed by testing the prototype. Experiments on the form and function will be conducted by engineers in the US and the NGO in Uganda. On a systems level, the thesis analyzes the diffusion of this innovation and challenges the current NGO model. By using the Bio Sand Filters as a case study, the project analyzes and proposes how NGOs can develop self-sustaining business models as they realign to empower people.

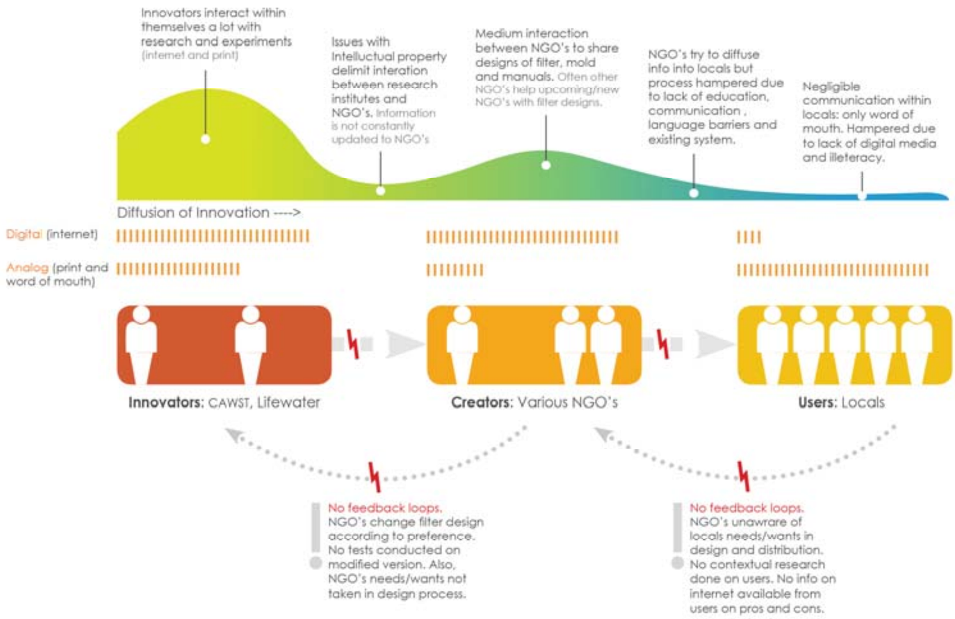


FIGURE 1 The Diffusion Gap

The project will conclude with the essentials of "Brand Identity". The BSF has become a brand in itself and such products take on new meaning in the market. This brand not only provides people with a choice, but is also deeply embedded in the process of empowering them. In such scenarios, advertising and communication skills can be used effectively in conjunction with the new service model to engage users to adopt the product as well as attract patrons and volunteers to support the system.

The NGO Transformation

The goal is to decentralize the current NGO model from a star to galaxy pattern as shown in Figure 2 where participants are interconnected through a network of users, change agents, and the local providers and manufacturers: businesses and entrepreneurs. This will ensure that the new design fosters a local enterprise around the filter. Thus, entrepreneurship and innovation are driven to a grass roots level, creating employment as well as giving local people a sense of ownership and pride in this system, as well as the ability to localize innovation.

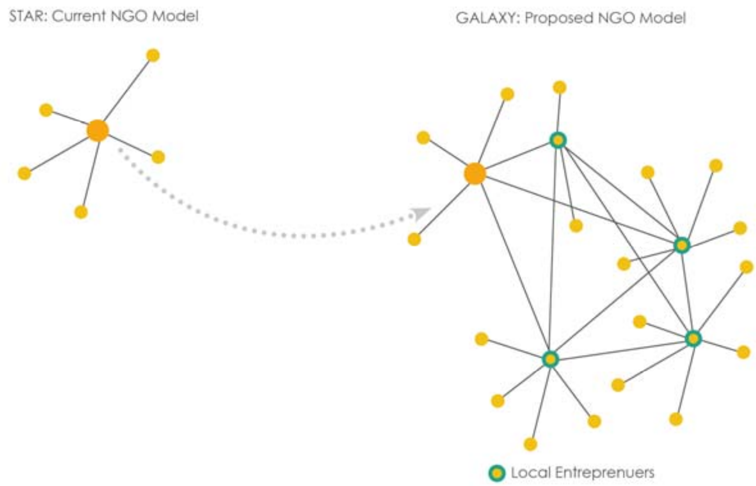


FIGURE 2 NGO Operations Model: Star to Galaxy

In order to do so, the NGO must transform itself and involve the local population in the co-creation of products and services. This S-curve transformation is shown in Figure 3. The NGO would shift from the current manufacturing and distribution level to the innovation/ diffusion management level. Hence, the NGO cultivates a sustainable enterprise throughout a larger region. Also, true empowerment of the community can be better achieved when *sympathy* is transformed into *empathy*. Furthermore, this transformation will take place with the NGO redesigning its organization and operations to be more in line with for-profit business models.

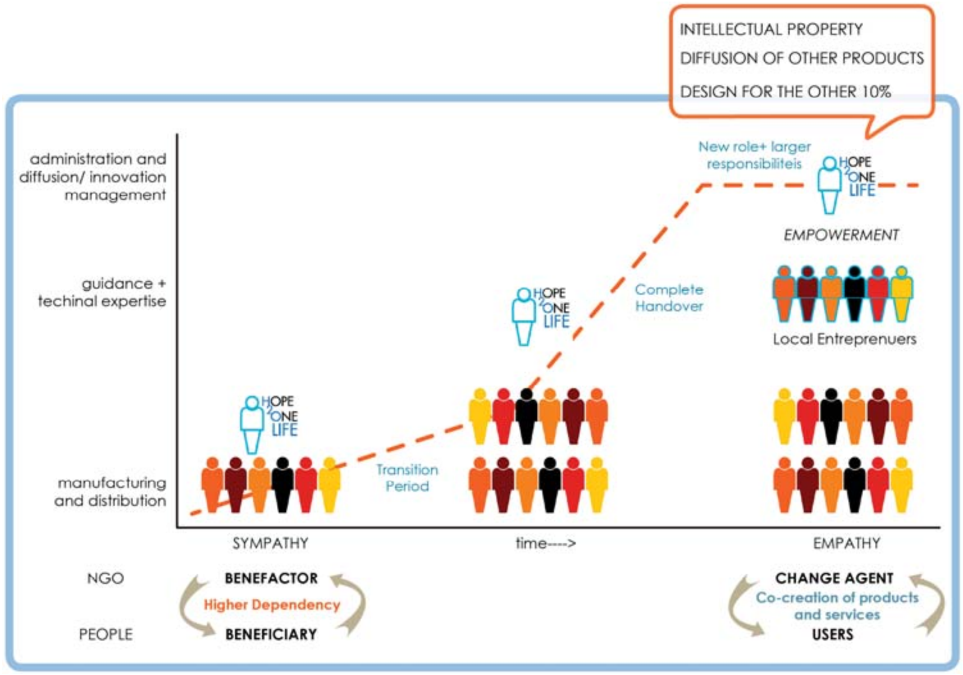


FIGURE 3 The NGO Transformation

Designing for the Other 90% – is a concept popularized by C.K. Prahalad in his book, *The Fortune at the Bottom of the Pyramid*. Prahalad segments the world's population based on their purchasing power and numbers into an economic pyramid. Those masses that lie below the poverty line are termed as "*Bottom of the Pyramid (BOP) Markets*" and are in huge volumes in most developing and under-developed countries. They do not have the money to buy expensive products. Hence the task here is to bring life-altering innovation to a level which can be afforded by all.

> What is needed is a better approach to help the poor, an approach that involves partnering with them to innovate and achieve sustainable win-win scenarios where the poor are actively engaged and, at the same time, the companies providing products and services to them are profitable.

NOTES

Acknowledgments – My sincere thanks to my mentor and thesis chair, Prof. Bob Fee, Savannah College of Art and Design (SCAD), without whose direction and guidance, this study would have been incomplete. Special thanks to my editor, Prof. Chris Miller, SCAD in introducing me to world beyond design. Prof. Verena Paepcke Hjeltness and Edward Dupuy, Dean of Graduate Studies, SCAD for their encouragement and support in overcoming obstacles during the research process. I would also like to thank Prof. Tom Gattis, Chair, Industrial Design, SCAD for funding several of my trips to conferences in order to present my work. Also, Nadine Hart, Terry Fettig , David Donohue and Tom Jacques from Hope to One Life, for providing me with the necessary insights and believing in my work. Lastly; I am in gratitude of my parents for supporting me in every step of this unpredictable journey. Thanks Guys!

DISCLAMER: This study questions the current usability and distribution model of the Bio-sand filter and does not challenge the technical or engineering aspect of the filter.

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Twisted Logic: Accelerating the Diffusion of Wind Energy

R CAMPBELL
The Savannah College of Art and Design

Experts say that 22% of U.S. electricity production can be produced with wind power by 2030. This is a plan that can help break the U.S. free from the economic strangle hold of foreign oil and reduce our countries' tremendous debt. This plan is based on studies for monumental-scale wind power in the U.S. wind corridor. We cannot argue that monumental wind turbines are efficient in producing electricity, but we can argue that the distribution of energy is not. This research study will show how we can accelerate the diffusion of wind at a much faster rate by looking at alternatives to monumental-scale wind turbines. There are three levels of wind power connection that must take place before the diffusion of wind energy can occur. These levels consist of the utility level, campus level, and residential level. This will lead to a higher percentage of electricity coming from wind power at an even faster rate. This expansion will also help to create more efficient development processes, and a greater connection to people and community.

The discovery phase of this research project emerged through a multiple lenses approach that was integrated with design thinking. This approach allows the design manager to understand structures of complex problems and to visualize the patterns and connections that emerge with in them.

For EPIC 2009, I present the following artifacts to provoke conversation and collaboration across practices:

- 3x6 banner that describes the process of the *Twisted Logic* research study
- A table top display that gives participants an opportunity to experience *Twisted Logic*
- An artifact that actualizes the future of residential wind turbines in big box stores

Empathic Concept Design Process

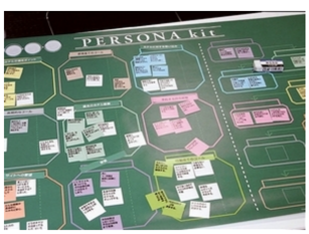
HIDEAKI SHIRANE
Marketing Communication Technologies, Daishinsha, Inc.

SHIHONO SUGA
Marketing Communication Technologies, Daishinsha, Inc.

WAKAKO KITAMURA
Marketing Communication Technologies, Daishinsha, Inc.

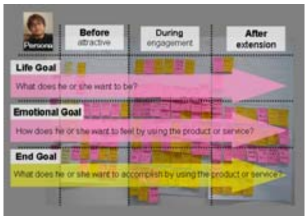
The Empathic Concept Design Process translates ethnographic research findings into a business concept for a comprehensive customer experience by combining existing tools including "Persona", "B/D/A Framework", and "Metaphor". An effective combination of well known tools provides a visible structure and enables us to work with clients without a background in ethnography / design.

The artifact includes the following tools and concepts:



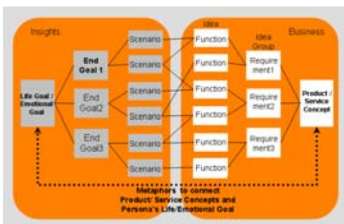
PERSONA TOOL KIT

Step1) is defining the three types of goals (Life/Emotional/End) in Persona (Cooper, 2004). Persona Tool Kit **is a one-hour board game that lets the player learn the process of Persona creation based on the insights acquired from ethnographic research.**



CUSTOMER EXPERIENCE MODEL FRAMEWORK

Step2) is exchanging ideas to support Persona's End Goal in the *Customer Experience Model Framework*. The framework encourages the user to comprehensively understand a customer's experience and broadens the mindset of idea development.



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EMPATHIC CONCEPT DEVELOPMENT FRAMEWORK

Step3) is creating a product/service concept that incorporates the idea groups from Step2) and metaphorically expressing the concept to support Persona's Life and Emotional Goals. Empathic Concept Development Framework helps the user visualize the relationships between their insights and new business concepts.

Our presentation is aimed to provoke discussions on the challenge of developing actionable business plans from ethnographic research findings.

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Future Hospital Team Communication Prototypes Expressing Research Insights

J. PAUL NEELEY
Mayo Clinic, Center for Innovation//SPARC

In this case study the research team sought to ease decision makers' post research anxiety through user generated prototypes. The prototypes spoke only to the desirability of solutions and were used to engage others with the research.

At SPARC, Mayo Clinic's embedded research and design group, we've seen decision makers sometimes experience a discomfort associated with compelling research. The discomfort comes from a now clear understanding of needs and problems, and a desire to see possible solutions. However this design work is often months away. In this example we sought to ease or eliminate this anxiety by moving quickly to user generated solution prototypes. The low fidelity prototypes spoke only to the desirability of possible solutions, and were used as a way to engage others in the research while alleviating this anxiety.

The project addressed team communication issues in a hospital setting. The research focused on information flow over a patient's entire hospitalization, and led to a number of insights and opportunities that would improve how the patient story is captured and communicated to teams involved in care. SPARC guided a multidisciplinary team of care providers through a low fidelity prototyping process in paper and powerpoint. The concepts and prototypes developed enabled new types of team communication and interaction with patient information and were shared with decision makers as a way to tell the story of research. Staff nurses then led drop-in sessions where 400+ participants walked through and explored the different workflows and concepts.

Figure 1. Nurses led their peers through research insights with low fidelity prototypes as guide

Personal communication devices, patient room screens, charge nurse tools, and room door screens were all imagined solutions that allowed for the real-time delivery of critical information to providers, and created an entirely new spectrum of meaningful conversations between teams around patient care. A hospital "global view" created an ambient awareness of activity throughout the hospital, and an amalgamated status of patient acuity, unit capacity, staff feeling and condition, shared across the hospitals built empathy between units and enabled new types of proactive care planning. These prototypes helped others engage with the research insights, and seemed to ease decision maker post research anxiety by quickly moving the team into meaningful solution oriented conversations. This helped create an institutional will for change around the insights which led to higher fidelity prototypes, pilots, and ultimately implemented practice changes.

Figure 2. Early concepts and story board around unit empathy and nurse connection.

Realizing the technological potential of young employees with LEGO ™ bricks

EMANUELE RAPETTI
New Media in Education Laboratory – Università della Svizzera italiana, Lugano (Switzerland)

MARINA BUTTI
New Media in Education Laboratory – Università della Svizzera italiana, Lugano (Switzerland)

SNJEZANA MISIC
New Media in Education Laboratory – Università della Svizzera italiana, Lugano (Switzerland)

LUCA BOTTURI
New Media in Education Laboratory – Università della Svizzera italiana, Lugano (Switzerland)

LORENZO CANTONI
New Media in Education Laboratory – Università della Svizzera italiana, Lugano (Switzerland)

Literature in the field of Information and Communication Technologies (ICT) indicates that the labels of "new millennium generation" and "generation Y", used for people born from 1980, actually reflect that such young people think and learn in a different way than the older "digital immigrants", because of they grew up in a world where digital technologies held an important place. In a word, they are "digital natives" (Prensky, 2001).

But how do digital natives learn? Moving from research about "generation Y" people (Howe & Strauss, 1991; Pedrò, OECD-CERI, 2006; Junco & Mastrodicasa, 2007), the ethnographic research "Gen Y @ work", presented in this artefact exhibit, involved young employees from six Swiss companies: three banks, one business agency, one printing and publishing company, and an engineering firm. The challenge was twofold: (a) describing the actual technological potential of new young employees and (b) identifying viable ways to leverage it, enabling a creative blend of private and professional learning skills related to ICT. An application example is the design of training systems more suitable with the new attitudes needs of young employees, leading to more effective learning and innovation of the company's learning culture.

A new ethnographic projective method was developed on purpose, inspired by the LEGO ™ Serious Play methodology (www.seriousplay.com) and on previous research (Gauntlett, 2007). Such a method, which is rolled out into workshops, helps participants to express hidden attitudes and feelings about ICT in their learning experiences. The method was backed by a survey and post-workshop blogs.

The method is structured in four steps (pictures are shown as example):

1. Build yourself using ICT and explain to the group your artifact
2. Build your favorite/most used ICT and explain
3. Build your favorite technology to learn and explain
4. Then, all together, set all the artifacts on a common landscape (split in two parts: "private life" and "at work") and use two connections each to link the four most important artifacts are on the table.

The results from the studies conducted in six companies provided useful information for employers, achieving a detailed description of the technological potential of young employees.

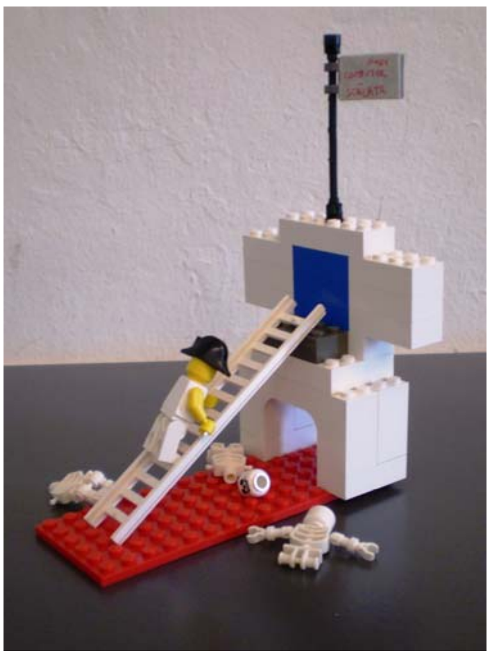

FIGURE 1: MYSELF USING ICT – "COMPUTER CLIMBING"

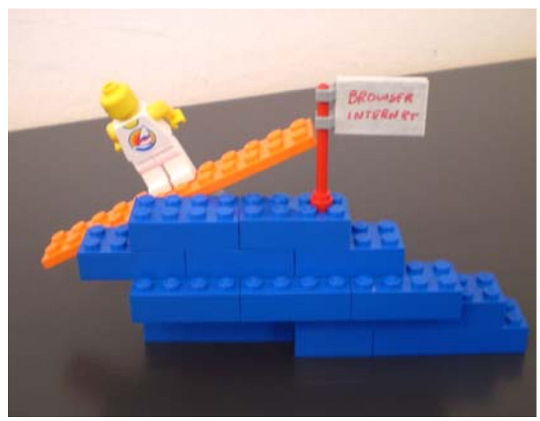

FIGURE 2: MY FAVORITE/MOST USED ICT – "INTERNET BROWSER"

FIGURE 3: MY FAVORITE TECHNOLOGY TO LEARN – “SEARCH ENGINE”

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Ethnographic Personas

JENNIFER A. RODE
University College London, Interaction Centre

ENZIAN BAUR
University College London, Interaction Centre

ANNA COX
University College London, Interaction Centre

This artifact presentation will introduce the notion of ethnographic personas, including a template, and a set of examples. Ethnographic personas are extensions of traditional data-driven personas but retain the richness of ethnographic findings combined with the memorability and ease of reference of single-sheet personas. Further they allow us to consider households, offices, and other constellations of users and technologies that richly interact with one another, as opposed to single isolated users.

Personas are an accepted means of communicating information about users to designers and engineers (Consolvo, et al., 2005; Cooper, 2005). Pruitt and Grudin (2002, 2003) recommend developing personas based on multiple user research methods (including field studies, focus groups, interviews, and market research). Pruitt and Grudin claim these personas are more engaging than Cooper's personas based on scenarios. In data-driven personas, a rich set of interviews is synthesized into a handful of personas; however, through distillations, the richness of the qualitative data is often lost. At the same time, ethnographers are struggling with how to translate their rich qualitative findings into information, which can be acted upon by engineers and designers (Buur & Sitorus, 2007; Jones, 2006). Ethnographic personas may provide a means for communicating the richness of field data to engineers without reducing it to a series of caricatures, which belie the complexity, nuance, and idiosyncratic nature of individual users. Further, they allow us to consider households, offices, and other constellations of users and technologies that richly interact with one another, as opposed to single isolated users.

Two templates for ethnographic personas have been developed. The first is an ethnographic persona for a study of an office-supply purchasing website, and the second is for a study of domestic technology use. Each persona has eight major sections as follows:

1. Quick reference icon. Icon showing the number of informants involved, company logo or representative photo of the household for quick identification.

2. Identifying information. Household or company name, number and year.
3. Informant list. List of informants including pseudonym, age, customer segment, task segmentation, icons for frequent computer tasks.
4. List of computers involved including Name, users, location, methods of supporting task (way of purchasing office supply, or media software).
5. Snapshot. An executive summary of key attributes of the office or household.
6. Interesting facts. The details of what was learned in the interview, including the work patterns of different individuals and the problems they have encountered.
7. Things to think about. Design implications to communicate to the design team.
8. Symbols. Key to icons listed in the informants segment.

Ethnographic personas provide a way of communicating the richness of ethnographic data; yet their persona-like attributes allow for use as a touchstone throughout the design process. Our initial experience with them in teams suggests they are a useful tool for integrating fieldwork findings into the design process. We will display some of these personas at EPIC.

NOTES

Acknowledgments – Thanks to Megan Ede for her help developing the initial templates.

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A Model of Appropriation of Information and Communication Technologies in Everyday Life

JOSE ROJAS
University of Glasgow

The model depicted in Figure 1 is the result of our application of grounded theory in the analysis of data collected in two ethnographic studies conducted in the UK from October 2007 to January 2008 and later in Japan, South Korea and China from July to November 2008 exploring the appropriation of information and communication technologies in everyday life.

Our model seeks to describe relationships between elements and forces that appear to lead to the appropriation of ICTs in everyday life. The most external layer of this model, the *social layer*, describes the influence of everyday settings in structuring the use of ICTs in terms of activity, socialisation and place. Activity refers to utilitarian uses of ICTs in everyday life to address common issues such as entertainment, leisure, work, study, etc. Socialisation explores the influence of different social groups (family, peers, organisations and governments, and the media) in determining which ICTs are to be used to mediate social relationships with members of those groups. Finally, place describes the restricting influence of the infrastructure, architectural layout and marketing practices in determining what ICTs are available and/or affordable and where and how these can be used.

The middle or *individual layer* illustrates people's agency on the face of changing environments in order to pursue their everyday activities. Elements in this layer are those we observed people purportedly manipulate in order to incorporate ICTs in those activities including 1) the type of message that can be transmitted through them, 2) the audience and level of involvement with it, 3) the location where they can be used, 4) the time of the day and the season of the year when they can be used, and 5) the costs associated with using them.

The innermost layer, the *digital-object layer* describes ICTs according to three subjective attributes bestowed on them as they are appropriated. A relevant ICT is that which, in its users' view, satisfies in a practical or perceived manner the task for which it is put to use (e.g., communication, entertainment, work). A trivial technology is that which, from a certain perspective, satisfies the following criteria: it has been commoditised by reason of being available and affordable, it has reached a certain maturity in its usability, and it has been made pervasive in society's landscape. The meaningfulness of a technology comes from being endowed by its users with intangible properties such as belonging, satisfaction, reliability, etc. as it is incorporated into their everyday activities.

A MODEL OF APPROPRIATION OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN EVERYDAY LIFE

Blogging user experience: updating the Journal

JARED JEFFERS
User Centric, Inc.

MARTIN HO
User Centric, Inc.

As ethnographers, we must be creative when selling ourselves, especially in today's economy with limited budgets to spend on extended ethnographic projects. To do so, we should prioritize the capturing of everyday experiences in a manner that is cost-effective to researchers, unobtrusive to informants, and that can further inform other types of research. This artifact shows the role that computers, specifically blogs, can play in this process.

In order to learn more about users' experience with digital cameras, camera hobbyists were asked to capture the same image of objects on three different digital cameras provided to them. Informants carried the cameras for a period of three weeks and took at least one picture a day, though many took more. They then uploaded these pictures to a blog built for this study and were asked to provide details about what they were doing leading up to the snapshot as well as what motivated their desire to capture the image. Finally, informants were asked to discuss the conditions under which the image was captured and to compare the picture quality on each of the three cameras. This information was gleaned to uncover users' needs and motivations that were not currently being addressed by camera manufacturers and to identify how photographers make decisions about the quality of cameras and digital photographs. Half of the participants were then selected to undergo in-depth interviews based on their blog posts and the experiences they described and their thought processes were mapped out to aid in the creation of personas of digital camera hobbyists.

Digital Camera and Computer with Blog

As an artifact, the computer and blog raise a number of questions about how technology can both enhance and affect user experience research. As a means of capturing the experience of camera hobbyists, blogging is simply an extension of the tools that hobbyists already use for capturing, reviewing, and processing digital images. As such, computers helped to remove some of the tediousness of journaling by providing an easy means of entering information on technology already being utilized by informants as a part of their hobby. Blogs can further change the journaling experience by potentially opening informant experiences to other members of the informant community for discussion and debate in ways that more traditional journal keeping methods could not. Furthermore, as computers become more and more mobile, it becomes possible for blogs to provide nearly real-time reports from users about their experience to researchers and stakeholders anywhere in the world. The artifact speaks to the advantages and limitations of computers and blogs, not only as a method of journal-keeping but also as a tool for user research and points to how we can better utilize technology to gather experiences from informants, both locally and globally.

Understanding phenomena, identifying opportunities and envisioning solutions through visual explanations

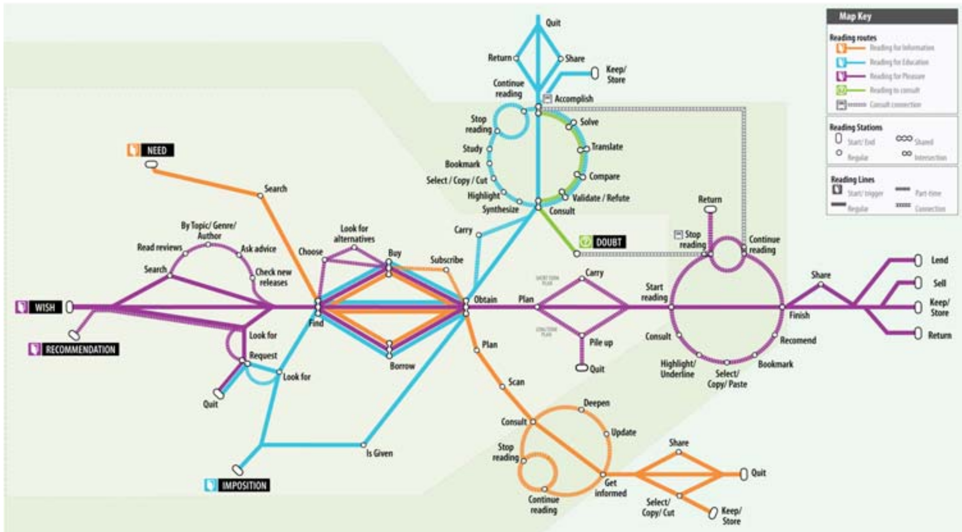
PATRICIA MEDINA
Insitum

"Information graphics reveal the hidden, explain the complex and illuminate the obscure"
Venkatesh Rajamanickam, 2007.

While the global economy slides into recession, organizations face new challenges and opportunities; as ethnographers, we are not an exception. We operate in a very dynamic market, so we have to stay agile and be able to react to these opportunities.

We must increase the efficiency in the implementation of research projects and the effectiveness in the mode we communicate the results. One way of doing so is to conceptualize and develop appropriate and visually rich materials that support and enhance our work.

At EPIC 2009, we display some case-study-infographics created in order to detect opportunities, product definition and possibilities for a digital reading device. With these materials we expect to provide a systematic way of looking events, collecting data, analyzing information, reporting results and finding insightful ways of looking at complex problems to stay relevant as ethnographers in today's economic climate.



Reading Routes

a visual explanation of the reading process using the intelligible language of a subway system.

NOTES

Acknowledgments – We would like to thank Benjamín Real, Gabriela Acevedo and Alejandra Contreras, researchers and designers at Insitum, for making possible the infographics that displayed at EPIC.

Investigating Investigators' Investigative Interviews

DARYA PILRAM
Northrop Grumman Technical Services

The Defense Personnel Security Research Center (PERSEREC) is a Department of Defense (DoD) agency dedicated to improving the effectiveness, efficiency and fairness of the DoD personnel and industrial security systems. PERSEREC researchers translate practical problems related to security policy and programs into researchable questions, and collect and analyze data. In addition to recommending new policies and procedures, researchers advise and assist in implementation useful to policymakers and practitioners.

The federal government uses personnel security investigations to determine whether an individual should be granted access to classified information. Investigations are the critical first step in safeguarding national security information. For this project, we are using ethnographic methods to understand specific challenges faced by investigators while conducting investigative field interviews. Gaining the investigators' perspectives from the field provides a more comprehensive understanding of best practices and how they might be both applicable and communicable to the investigative community.

RATIONALE

Along with record checks and a completed security questionnaire, the investigative interviews are the primary tools that investigators use to collect accurate and complete information about a subject's background. Oftentimes, conducting personal interviews can be challenging for investigators because of difficulties with establishing appropriate communication dynamics and rapport needed to gather personal details about a subject's life. By using ethnographic methods to understand the working environment of current contract and federal investigators, we hope to better understand the challenges investigators face from the field perspective. The results of this study will produce a best practices document that will be shared throughout the investigative community and assist in future policy direction.

NOTES

Acknowledgments – Thank you to my colleagues at the Defense Personnel Security Research Center (PERSEREC) for encouragement and showing me the ropes. A special thanks goes to the investigators who have volunteered their time and knowledge 'of the field' for this study and the American Federal Contract Investigators Association (AFCIA) for support and guidance.

Piipl: A Webtool for Design Research and Co-Creation

EZRA GOLDMAN
Piipl, Copenhagen, Denmark

Engaging end users in the design process is difficult to manage and people's latent creativity is untapped. Piipl is a webtool that gives access to customer experiences to easily gain insights into their needs and to directly engage them in the design of new products or services. Currently, there are companies that either sell research tools, build private social networks, or crowdsource for concept development. Piipl combines these to help you to build an online community, gather their insights in one place, and involve them directly in the innovation process.

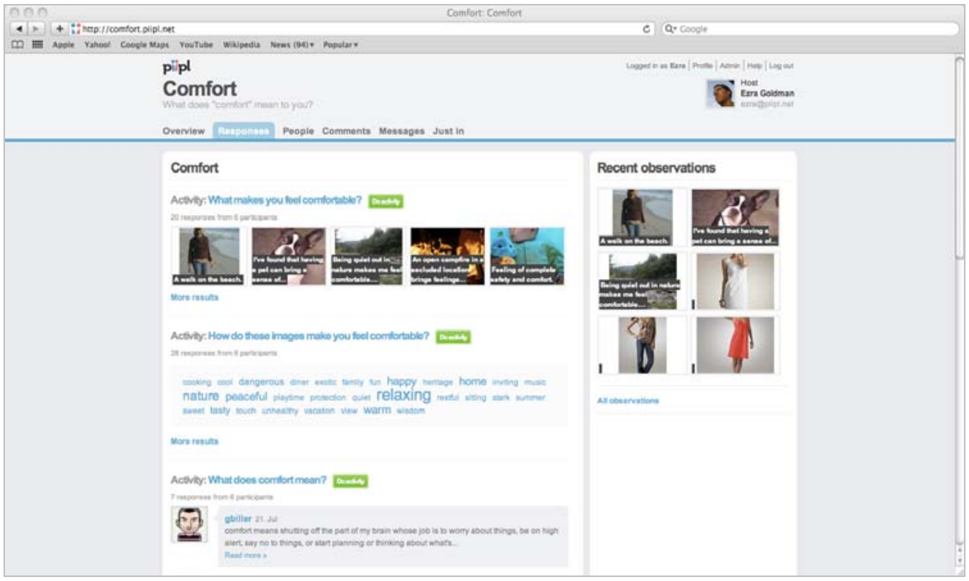
USING piipl TO SIMPLIFY YOUR PROCESS

Participants are usually handled separately but then the results of the process need to be compiled to be analyzed. With piipl, all the information is in one place as it comes in, making it easier to manage the process, motivate participants, and start your analysis.

The relationship with end users is also usually one way: the researcher observes or interviews the participant in the study and then takes the material back behind closed doors to interpret meaning out of the collective results. With piipl, participants can directly engage with one another to uncover deeper insights and to actively participate in co-creating new products or services.

Letting piipl work for you

Imagine you are a consultant working for a fashion company that wants to unpack the concept of "comfort" to influence their new product line. You set up a secure, closed piipl "room" where you as a "host" can set up question-based activities around the theme of "comfort". You then invite participants in and ask them to submit observations in the form of text, video, or photos. Finally, you engage participants with this content by setting up various activities such as tagging, prioritizing, and organized discussions to dig deeper. You choose the tools, the questions and the order of the process flow. The results are all right there, and are updated instantly.



DEMONSTRATION ROOM ON COMFORT

PRACTICAL INFORMATION

Piipl has recently finished beta testing with a range from large multinational companies to smaller Danish consulting firms. Personal conversations with over 100 companies in Europe and the US have influenced design decisions and give us confidence that piipl is a robust platform not found elsewhere.

Piipl services

Companies with consultants in-house can order an à la carte service, where you pay a monthly fee to use the tool. Piipl can also manage part or all of the process leveraging a skilled network of consultants in the US and Europe.

Who started piipl?

Three parent companies in Denmark started piipl. Workz is a change consultancy, 23 is a visual sharing company, and Copenhagen Living Labs facilitates user-driven innovation processes. Co-financing is provided by a 2-year half-million euro grant from the Danish Enterprise and Construction Authority.

Learn More

Login to www.comfort.piipl.net to participate in an online demonstration project. If you would like to join our network of consultants, use your skills to help us grow, see a demonstration, or know people we should meet, please contact us at info@piipl.net.

CONTRIBUTORS

Ryan Aipperspach (*ryanaip@alumni.rice.edu*) has an MS in Computer Science from the University of California Berkeley, where he studied at the Berkeley Institute of Design. There, his focus was on studying and developing portable domestic technologies. He is currently on leave developing GoodGuide.com, a website to help people find safe, healthy, and green products.

ken anderson *(ken.anderson@intel.com)* is an iconoclast by nature and symbolic anthropologist by training. He currently conducts anthropological research in Intel Labs focusing on the importance of participation in technology practice, design and adoption.

Amit Bapat (*amit.s.bapat@gmail.com*) is an Industrial Designer + Design Manager, blending his technical, artistic and branding knowledge to create solutions for emerging markets. His well balanced perspective in Industrial Design results from a multidisciplinary approach to problem solving. He is currently pursuing his MFA in Industrial Design from the Savannah College of Art and Design, Savannah, GA. He previously earned a BE in Electronic and Telecommunications Engineering at MESCOE in Pune, India.

Enzian Baur is a researcher at the University College London, Interaction Center where she is working on a Knowledge Transfer Project with an industry collaborator, Paperstone.co.uk. She has an MSc in IT Usability and has previously worked on usability design and evaluation research with learning technologies.

Maria Bezaitis (maria.bezaitis@intel.com) has been the Director of People & Practices Research at Intel Corporation since June 2006. She has spent 14 years developing and leading ethnographic research organizations across a range of industry contexts. She has a PhD in French Literature and Cultural Studies from Duke University. She can be reached at For more information on People & Practices Research please visit us at http://papr.intel-research.net.

Robbie Blinkoff (*rblinkoff@contextresearch.com*) has been the Principal Anthropologist overseeing operations at Context since helping found the company in 1999. Robbie's project responsibilities focus on creating research experiences that lead to breakthrough insights and solutions. Under Robbie's direction, Context has worked with clients such as: The Associated Press, American Express, Adobe Systems Inc., Procter & Gamble, Kodak, Fisher-Price, Sony, Microsoft, Kraft Foods, General Mills, GlaxoSmithKline, and Nike.

Luca Botturi *(luca.botturi@usi.ch)* holds a Ph.D. in Communication Sciences and Instructional Design. He worked as a researcher and practitioner in new media in Italy, Switzerland, Canada, Spain and the USA. Luca is currently an instructional designer and researcher for the NewMinE Lab and an online instructor at the Universitat Oberta de Catalunya, Spain.

Nan Bress *(nan@docnography.com)* has worked for the past ten years as an ethnographic researcher, focusing on medical ethnographies and consumer goods, and as a documentarian, working on PBS and independent documentaries, television, and news. She holds an M.A. from Stanford University in Documentary Film and Video Production, an M.A. from the University of Chicago in the Social Sciences, and a B.A. with honors in History from Swarthmore College. "Docnography" (documentary + ethnography) is the name of her research/production company. Nan shoots and edits her own work.

Louise Buch

Marina Butti Romanova *(marina.butti.romanova@usi.ch)* Born in Russia, Marina got her degree in Science of Communication. She is researcher at NewMinELab in the field of Technology-Enhanced Communication for Cultural Heritage. Her research interests include interactive communication for museums, web 2.0 and online social networks.

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.

R Campbell (*rbuonarroti@gmail.com*) is an MFA Design Management candidate at Savannah College of Art and Design. A native of Stillwater, Oklahoma, Campbell has defined the role of design as an essential partner in business creation in today's fast moving global economy. He has created and managed strategic design projects with several major design schools. By focusing beyond traditional product lines, these projects fused design, interaction, and cultural factors across domestic, European, and Asian markets.

Lorenzo Cantoni *(lorenso.cantoni@usi.ch)* graduated in Philosophy and holds a PhD in Education and Linguistics. He is professor at the University of Lugano (Switzerland), Faculty of Communication Sciences. He is director of the laboratories webatelier.net: production and promotion over the Internet, NewMinE Lab: New Media in Education Lab, eLab: eLearning Lab.

Hillary Carey *(HCarey@ideo.com)* is a design researcher at IDEO's Bay Area offices. She completed her BFA and Masters of Design from Carnegie Mellon University. She applies human centered design methods to a variety of industries, focusing on the complex challenges in education and health care.

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 personal and public social technologies.

Amy Clarke helps client teams understand users and clearly see new opportunities for growth. She has a diverse background in engineering, project management, and socially conscious design. Amy holds a B.S. in civil engineering from Rice University.

Chris Conley (*chris@limechile.com*) is the co-founder of LimeChile Productions, creators of Guapovideo.com and Websort.net. He is also a partner in gravitytank, the Chicago based consultancy and former associate professor of design at the Illinois Institute of Technology.

Peter Coppin (*petercoppin@gmail.com)* is a PhD student in the Faculty of Information at the University of Toronto. His research falls at the intersection of visual information and cognition.

Kelly Costello *(Kelly.costello@doblin.com)*. With well beyond a decade of ethnographic research and consulting experience, Kelly has expertise in the complete innovation lifecycle—from the fuzzy front end to market-ready products, services and systems. Her professional experience with both product development and information systems provides a solid basis for understanding challenges facing clients. She has consulted within a broad range of industries, including health care, consumer goods, telecommunications and others. Kelly holds an MDes from the Institute of Design, and a degree in visual communication of Anthropology from the University of Memphis.

Anna Cox is a senior lecturer at the University College London, Interaction Center. While a psychologist by training, she is interested in interdisciplinary research methods in HCI. She is author of a textbook Research Methods for Human Computer Interaction which covers quantitative and qualitative approaches. She is PI for the UCL/Paperstone Knowledge Transfer Project.

Michelle Curry collaborates with client teams to discover unmet needs and translates those insights into tangible, real-world innovations. She taught high school in Kenya as a member of the Peace Corps. She holds a B.A. in Mathematical Methods in the Social Sciences from Northwestern University.

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, focused primarily on education and low-income settings. More recently, he has been interested in studying organization practices involving the development and marketing of technology. His specialties are in social studies of technology, HCI, ICT4D, and services. His current work focuses on new literacies and new media in education and the economics and politics of technology development and deployment in the developing countries.

Don Derosbly is a senior practitioner at GBN, and an expert in scenario thinking and in system dynamics, a set of methods that allow decision-makers to see how business choices cascade down through entire organizations. Don has extensive experience in analyzing industry attractiveness, competitive positioning, corporate culture and capability building. Since joining GBN in 1996, Don has focused on projects in health sciences, professional services, commodities, and national defense. Don holds a BS from Northwestern

University, an MA in anthropology from the University of Chicago, and an MBA from Harvard.

Susan Dray *(susan.dray@dray.com)* heads Dray & Associates, Inc., a user-centered design and research consulting firm that, in addition to other things, provides contextual user research around the world. She helps her clients to make products that deeply connect with their users' lives and fit with their contexts. She is actively involved in the "User Centered Design for International Development" movement, and in plays leadership roles in a number of professional organizations, but her biggest thrill is getting into the field with her clients.

Ame Elliott *(ame@ideo.com)* is a Senior Human Factors Specialist at IDEO in Palo Alto, California. Her research focuses on developing technology strategy grounded in human needs.

Gitte Engelund (*gen@oticon.dk*) works at Oticon A/S, a Hearing Instrument Manufacture, and holds a MA of Audiologopedic from University Copenhagen and an Industrial PhD which was done as a collaboration between the University of Copenhagen and Oticon A/S. Gitte is managing user research and user knowledge at Oticon's Centre for Design Thinking.

Johanne Mose Entwistle *(johanne.mose@alexandra.dk)* MA in Anthropology. Business Understanding, Alexandra Institute (www.alexandra.dk)

Donna K. Flynn *(dflynn@microsoft.com)* currently leads initiatives on consumer experiences and strategy in Microsoft's Entertainment & Devices Division. She works closely with designers, product development leadership, and marketing leadership to design next-generation experiences for people around the world. Every day she muses about how her doctoral training in smuggling dynamics of rural Africa prepared her well for the wilds of applied anthropology in business and technology.

Jessie Gatto is an innovation consultant, with skills in design planning and concept development. She has worked on a wide range of projects in healthcare, consumer goods, medical services, and distribution. Prior to joining Doblin, Jessie worked for a furniture systems manufacturer, where she performed research and helped to develop a design planning training course. She has also held design planning positions in interior architecture, city/transportation planning, and web development. Jessie holds a BS in physical science and the humanities from the University of Chicago, and an MDes from the IIT Institute of Design.

Ezra Goldman (*ezra@piipl.net*) is a user centered design strategist focused on understanding the interrelationship between people, places and things to design innovative solutions. He holds a BA in anthropology from Reed College and an MCP (Urban Planning) from MIT. Clients include HP, Piaggio, City Carshare and the cities of Boston, Shanghai and Copenhagen.

Rebecca E. Grinter is an Associate Professor in the College of Computing at Georgia Institute of Technology.

Per Helmersen *(per.helmersen@teleno.com)* is Senior Research Psychologist in Telenor Group Business Development and Research, where he has been employed since 1992. Since joining Telenor most of his projects have focused on various marginalized user groups, and since 2002, financially constrained customers in emerging markets. Special interests include communication ecologies, telemedicine, agricultural commodity trade and participatory design.

Martin Ho *(mho@usercentric.com)* is a Senior User Experience Specialist with User Centric, Inc. He has a strong background in research methodologies and interview techniques. Martin holds a B.A. in Psychology and Sociology from the University of Virginia and an M.A. in Clinical Psychology from the University of Denver.

Roberto Holguin *(robertoholguin@insitum.com)* is Director of Operations (or COO) of insitum. Roberto has 15 years of experience in design research projects. He's created concepts and strategies for a diverse range of clients from Latin American clients such as Telmex, to Intel and Nokia. In additional to his professional development, he lectures at the Universidad Iberoamericana in Mexico City. He holds a BA in graphic design and a Masters degree from the Illinois Institute of Technology in Chicago.

Mads Holme (*mh@redassociates.dk*) works at ReD Associates' Copenhagen office. Mads holds an M.A. in Ethnology and Rhetoric from the University of Copenhagen.

Catherine Howard *(Catherine@jumpassociates.com)* is a project lead at Jump Associates. She holds an MA in Material Anthropology and Museum Ethnography from Oxford University, and a BA in Cultural Anthropology from UCLA. She has conducted ethnographic and design research in Mexico, Argentina, Brazil, Japan, Canada and the UK.

Suzanne Gibbs Howard (*SHoward@ideo.com)* is a Design Director who focuses on constantly sharpening the cutting edge of IDEO's insight capabilities. She has gathered inspiration, information and fuel for Human Centered Design across industries as disparate as fashion, healthcare, agriculture, technology, new media, food, and of course, education. She has a BA in Art History and African Studies from Northwestern University and a MA in Integrated Social Sciences focusing on the Anthropology of Religion from The University of Chicago. Check out her latest public experiment: http://patterns.ideo.com

Eiko Ikeda (*eikeda@daishinsha.jp)* is a director of design research at Daishinsha's Marketing Communication Technologies. Eiko has extensive experience introducing cutting edge methodologies in research and user-centered design to Japanese clients.

Jared Jeffers *(jjeffers@usercentric.com)* is a User Experience Specialist with User Centric, Inc. He has managed to combine his passion for anthropology and ethnographic methods with his interest in emerging technologies. Jared holds a B.A. in Social Anthropology from the University of Michigan as well as an M.A. in Social Science from the University of Chicago.

Tracy Johnson (*tjohnson@contextresearch.com*) is a cultural anthropologist with extensive experience in ethnographic methodologies. As Research Director, Tracy's responsibilities include customizing research to answer client needs, and expanding Context's ethnographic research toolkit. She leads the analysis and development of experience models for a diverse range of clients, including Wyeth Pharmaceuticals, Verizon, The Associated Press, Booz Allen Hamilton, and General Mills.

Truls Erik Johnsen (*truls-erik.johnsen@telenor.com*) is a Research Scientist in Telenor Group Business Development and Research, where he has been employed since 2005. Johnsen is a trained ethnologist from the University of Oslo, and works in the field of technology, society and culture. In Telenor Johnsen has worked on projects related to youth culture, consumption patterns and cultural diversity. Special interests are youth culture, trans-nationality, and social networks.

Gavin Johnston is Chief Anthropologist at Two West. Take an ex-chef turned anthropologist and set him free to conduct ethnography, brand positioning, and product development and you have Gavin. Gavin leads the Two West research and strategy team in ethnographic fieldwork and analysis, research translation, and business-focused methodology development.

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! Patrick earned his Ph.D. From the University of Chicago based on an ethnographic study of applied scientists in Brazil.

Filip Lau (*lau@redassociates.de*, *filiplau@gmail.com*) is sociologist and one of the founding partners of ReD Associates. He the head of ReD Associates' Hamburg office. Filip is external lecturer at the Institute of Political Sciences at the University of Copenhagen. He is author of the book 'Globalisterne' ('The Globalists') with Camilla Mehlsen.

Josh Kaplan (*joshua.kaplan@yale.edu*) is an anthropologist and research fellow at Yale University, Institution for Social and Policy Studies. He consults for organizations ranging from grassroots NGOs to Fortune 500 companies and is looking out for better ways to make use of anthropological expertise. At Yale, he is finishing a book on the social and political dimensions to international lawmaking.

Carl Kay (*carlkay@mub.biglobe.ne.jp*) is Director of International Research at Daishinsha. Kay's experience includes two decades as an entrepreneur in both the US and Japan as well as consulting, writing, teaching and venture investing. He helps Daishinsha identify and implement in Japan cutting edge methodologies in research and user-centered design.

Wakako Kitamura *(design2jam@gmail.com)* is an ethnographer at Daishinsha's Marketing Communication Technologies. Wakako covers new educational program and medical support system service design.

Olga Khroustaleva *(okhroust@google.com) i*s a user experience researcher focusing on Google's geographic products. She joined Google after getting her Master's degree in Human Computer Interaction from the University of Michigan and brief stints working for the United Nations in Geneva and District Six Museum in Cape Town.

Kathi R. Kitner *(kathi.r.kitner@intel.com)* a cultural anthropologist with People and Practices Research group since 2006, has always been interested in community-led sustainable development and how practices around social class alter such paths. She is currently researching the interplay between class, consumption, shifting world economies and technology adoption in the project Consumerization. Kathi also has a long-standing interest in maritime cultures and continues to be involved with issues surrounding water use and climate changes. Some of her previous research has focused on the uneven process of modernization/globalization in the guise of free port economics, oil and tourism in Venezuela; an exploration of needle use among street-based heroin addicts in Miami; and conducting social and cultural impact assessment of new federal regulations on US fishing communities. Kitner holds a Ph.D. in Anthropology and Latin American Studies from the University of Florida.

Renee Kuriyan *(renee.kuriyan.wittemyer@intel.com)* holds a PhD from the University of California, Berkeley focused in Development Studies. She has a Masters degree in Public Affairs from Princeton University's Woodrow Wilson School with a focus in international development and science and technology policy. She has experience conducting research on a range of technology and development topics in developing economies. This includes projects with the World Bank, United Nations Development Program, NGOs, and Microsoft Research India. Her current research focuses on the cultural politics of consumption, the middle class and globalization. She continues her research on the political economy of information and communication technologies and development (ICTD).

Xueming Lang is a user-researcher working at Intel, China, as part of a global research team studying emerging markets. His field work primarily focuses on PRC and currently he has been conducting user-research to support the development of new education products for Intel. His MA is in engineering psychology.

Gerald Lombardi *(jerry@geraldlombardi.net)* is a director of the healthcare practice at Hall & Partners, a brand and communications research agency. Prior to that he was an experience modeler at Sapient, then co-founded the ethnographic practice at GfK, a global market research firm, and became the practice's Vice President for North America. He has been a private sector anthropologist since 1991, when still a graduate student. His Ph.D. is in cultural and linguistic anthropology from New York University.

Tracey Lovejoy (*traceylo@microsoft.com*) currently leads the Mobile Communications UX Research team at Microsoft, where she has worked in numerous roles 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.

Alexandra Mack (*alexandra.mack@pb.com*) is a Workplace Anthropologist in the Advanced Concepts and Technology Division of Pitney Bowes. Her work is focused on developing ideas for new products, services, and technologies based on a deep understanding of work practice. She is currently focused on understanding how to best enable employee networking and collaboration.

Camila M. Magnus recently received her master's degree in Anthropology from the University of Barcelona.

Scott Mainwaring (*scott.mainwaring@intel.com*) has an eclectic background in computer, cognitive, and social sciences. For the last 12 years, Scott has combined his interests in ethnographic studies with the revolutionary potential for information and computing technologies in everyday life. At Interval Research, Scott collaborated with designers, business planners, engineers, and video artists to design audio-based media spaces, virtual worlds, ICT-augmented television, and services for the Baby Boom generation. At Intel, Scott explores the relationships between individuals and the systems in which they find themselves embedded. Scott's current focus is on digital money and how new technologies of transaction can better serve individual interests and address money's emotional, cultural, and religious meanings. Scott received an A.B. in computer science from Harvard University and a PhD in cognitive psychology from Stanford University.

Timothy de Waal Malefyt *(timothy.malefyt@bbdo.com or malefytt@newschool.edu)* is Vice President, Director of Cultural Discoveries at BBDO Worldwide advertising in NYC, and leads an in-agency ethnographic practice. He also teaches advertising, design research methods, and consumerism and shopping as an adjunct professor at Parsons (New School for Design). Malefyt holds a PhD in anthropology from Brown University. Malefyt is co-editor of Advertising Cultures (2003),has written numerous scholarly and trade publications, and is often quoted in popular media such as Business Week, The New York Times, TimeOut Magazine.

Wendy March *(wendy.march@intel.com)* is a Senior Designer in People and Practices Research. Her current research focuses on the design of mobile devices. Wendy's previous research has included the design of money to reflect social values, smart streets, the use of technology by teenage girls, and the design of technologies for use by communities.

Chad Maxwell

Catherine McCorkindale *(Catherine.McCorkindale@xerox.com)* is a computer scientist in the Scalable Computing and Web Technologies team, in the Xerox Innovation Group. She has worked in manufacturing, product development, and research. She has recently worked in the areas of internet services and the future of work.

Ryan McNeil serves Two West as the Transformation Analyst with the Consulting Services team. Ryan's area of expertise is facilitating the adaptation, implementation and analysis of research findings, ideation and rapid prototype sessions. He is trained in the Creative Problem Solving process.

Patricia Medina (*patymedina@insitum.com*) is a senior consultant of Insitum, where she handles different aspects of projects, from developing methodologies to handing field interviews, analysis and synthesis of data and translation of the findings into meaningful insights. She is interested in using anthropological sensitivities and design research methods to understand how and why people act the way they do, driven by a desire to create experiences that are meaningful based on that understanding. Her strengths include making the complex simple though the visual display of data, information and knowledge. Nowadays as Project Leader, she works closely with clients and users to identify and translate unmet needs into useful, usable and desirable experiences.

Joanne Mendel *(jmendel@cheskin.com)* currently leads Cheskin's Design Methods Studio. She blends a background in product & service design with visual modeling in a problem-solving approach for clients. Joanne has a BFA in Graphic Design from California College of the Arts, a BA in Fine Art from the University of Kentucky and a Masters of Design in Human-Centered Communications from the Institute of Design, Illinois Institute of Technology.

Sniezana Misic *(snjezana.misic@usi.ch)* obtained a Master in Science of Communication, Major in Public Communication, with a specialization in health communication. She is researcher at NewMinELab aiming to understand how young people, especially Generation Y workers, use new technologies and to consider the implications on workplace dynamics.

Pete Mortensen *(Pete@jumpassociates.com)* is an associate at Jump and co-author of *Wired to Care: How Companies Prosper When They Create Widespread Empathy*. A journalist by training, he has written and edited for publications including Spin Magazine and Wired.com. Pete holds a dual BA in journalism and English literature from Northwestern University.

Bruno Moynié's *(contact@mondemoderne.com)* two Master's – one in Social Anthropology (Aix-En-Provence University, France) and one in Ethnographic Film (University of Montréal, Canada) – and professional experience in television and commercial production places Bruno Moynié in a class of his own. He is one of a handful of bona fide anthropologist filmmakers working in the marketing and design research industry. Based in both Toronto and Paris, Bruno's ethnographic marketing and design research film projects have taken him all over the world: through Canada, Europe, Asia, Africa, and the Americas.

Dawn Nafus *(dawn.nafus@intel.com)* is an anthropologist Intel, where she conducts social science research to inspire new products and strategies. She holds a PhD in Anthropology from Cambridge University, and was previously a research fellow at University of Essex. She has published widely on communication technology and society in academic journals, and worked with both public policy makers and industry leaders on issues such as widening participation in open source communities and knowledge transfer policies for local economic development. Her recent work has focused on technology and time use. Her areas of regional expertise are Russia and the UK.

Yelena Nakhimovsky *(yelenan@google.com)* is a user experience researcher at Google, focusing on mobile products. She has led research for Google Maps for Mobile, mobile Gmail, mobile Search, iPhone products from Google, among other mobile and non-mobile projects, including contributing to in-house mobile research infrastructure. Yelena received her M.S. in Human Computer Interaction from Georgia Tech.

J. Paul Neeley *(Neeley.james@mayo.edu)* is a Designer/Researcher at Mayo Clinic's Center for Innovation//SPARC. The group works to innovate healthcare delivery & experience through human-centered research and design. He previously worked at Unilever in Consumer and Market Insights, and at Medical Imaging Associates as the Service Design lead. He is a graduate of Northwestern University in Communication Studies and Economics.

Monica Orozco (monicaorozco@insitum.com) has worked in insitum for 6 years. Her experience lies on product innovation projects in the food & beverage, editorial and telecommunications industries. She plans, coordinates and carries out projects in Latin America, Brazil and the US. She holds a BA in Industrial Design from the UNAM in Mexico City.

Isil Oygur (*isil_oygur@wsu.edu)* is a Doctor of Design student and a graduate assistant at Interdisciplinary Design Institute, Washington State University Spokane. She holds a bachelor's degree in industrial design from Middle East Technical University, Department of Industrial Design and a M.Sc. degree from Istanbul Technical University, Department of Industrial Product Design.

Fatih Kursat Ozenc *(kursat@cmu.edu)* is a Ph.D. candidate at School of Design, Carnegie Mellon University. Currently he is working on his dissertation, titled "Designing for Transitional Experiences" with concentrations on ubiquitous and social computing. In his dissertation, he develops a "theory of experience design" for designers and HCI practitioners to design interactive and service products, explicitly addressing issues around transitions.

TinePark is a strategic design consultant with Designit, Scandinavia's largest integrated strategic design consultancy, with offices in Copenhagen, Aarhus, Munich, Oslo, Paris and Shanghai. By combining human needs with business strategy, Designit acts as an agent of change for businesses and society. Tine has an MA in Industrial Design from Aarhus School of Architecture, Denmark. She has also studied anthropology at the University of Copenhagen, Denmark. Her focus is user-driven innovation and life-improving design.

John Payne *(jpayne@momentdesign.com)* is Principal at Moment, an interaction design firm. He is responsible for the experience strategy and design practices. John holds Master's and Bachelor's degrees in design from Illinois Institute of Technology and Auburn University respectively. He has developed and taught courses at NYU, Parsons, and for corporate audiences.

Erik Peterson (*eriklpeterson@yahoo.com*) is a graduate student studying art at the University of Illinois at Chicago. His work often intervenes in public space and engages anthropological issues. Peterson is currently working with community leaders to develop a Hmong-American version of Guitar Hero® and will be presenting at the AIGA conference in October.

Darya Pilram (*Darya.Pilram.CTR@osd.pentagon.mil*) is a research analyst with the Defense Personnel Security Research Center (PERSEREC) bringing her ambition to apply qualitative research to help improve the DoD Personnel Security Program.

Steve Portigal

David Prendergast *(David.K.Prendergast@intel.com)* is a social anthropologist in the Digital Health group at Intel and a Principal Investigator in the Social Connection Strand of the Technology Research for Independent Living (TRIL) Centre. His research focuses on later life-course transitions and he has authored a number of books and articles on ageing and health. David utilises ethnographic research to co-design, test and iteratively develop culturally appropriate independent living technologies for older people.

Emanuele Rapetti *(emanuele.rapetti@usi.ch)* is an Italian pedagogist. He is a PhD student at at NewMinELab. His thesis is about e-learning, particularly studying how it's changing the way people learn in the knowledge society. His research interests are: Pedagogy and Educational Issue for Third Millennium, E-learning, Media Education, E-ethnography, E-evaluation, and Qualitative methods in educative-social research.

Tye Rattenbury (*tye.l.rattenbury@intel.com*) is a researcher in the People and Practices Research group at Intel. His research interests revolve around mixed-methods studies of technology use and adoption. Tye holds a PhD in Computer Science from the University of California, Berkeley and a BS in Applied Mathematics from the University of Colorado at Boulder.

Jens Riegelsberger *(jensr@google.com)* is a senior researcher in Google's user experience team in London and leads research for Google's geographic products. Prior to Google he conducted research for LBi, Microsoft Research, and Amazon. Jens holds a Ph.D. in Human Computer Interaction from University College London (UCL).

Rick E Robinson (*rickerobinson@gmail.com*) has been developing and applying research methodologies for application in industry for nearly 20 years. His Ph.D. is from the University of Chicago, Committee on Human Development. Currently, he is a research fellow at *Continuum*, and editor of *pulp*.

Jennifer Rode *(j.rode@cs.ucl.ac.uk)* is an assistant professor at the University College London, Interaction Center, and a fellow of the Digital Anthropology program. She was advised by Paul Dourish and Genevieve Bell at UCI for her dissertation on gender and security. Rode has done ethnographic work for TiVo, IBM, Synaptics, and Symantec amongst others.

Frank Romagosa, PhD *(frank.a.romagosa@gmail.com)* is a design strategist and innovation planner. For the past decade, he has built new products, services, and communication strategies for several Global 100 and Fortune 500 clients in banking and credit cards, medicine and pharmaceuticals, technology, and has contributed planning work to several start-ups in retail and financial services. Frank received a doctorate in Socio-Cultural Anthropology from the University of Chicago.

Jose Rojas *(jose.rojasr@gmail.com)* is currently finishing a PhD in HCI at the University of Glasgow. He is interested in understanding how yesterday's complex technologies have become today's common objects and whether it is possible to replicate that process expediting the transformation of today's novel prototypes into tomorrow's common objects. He is also eagerly trying to find a job!

Simon Roberts *(Simon.W.Roberts@intel.com)* leads the European social science and design team for Product Research and Incubation in Europe. He is an applied anthropologist with over ten years of experience translating research into product, service and business opportunities. Simon has published widely on ethnography, the application of anthropology, technology, design and the ageing experience.

Simon Rubens *(simon.rubens@new-experience.com)* is Director of new experience limited, a London-based user experience research company which he founded in 2003. Prior to this Simon was a director of user experience at Sapient's London office. Simon has a BSc in Psychology and an MSc in Ergonomics.

Autumn Sanders *(autumnsanders@gmail.com)* is a journalist, graphic designer, design researcher and MA candidate in Graphic Design attending the Savannah College of Art and Design. Prior to attending SCAD, she worked at the St. Petersburg Times and graduated from Ohio University (Athens, OH).

Shelley Sather collaborates with clients to unearth insights and help frame opportunity spaces for growth. Her depth of experience in the field has served clients across a wide range of categories, including Nintendo, Land O' Lakes and Dow. She holds a B.A. in English Literature from Northwestern University.

Heinrich Schwarz *(hsc@redassociates.de)* works at ReD Associates' Hamburg office. Prior to joining ReD he held a faculty position in Communication at the University of Colorado at Boulder. Heinrich has a Ph.D in Science & Technology Studies from M.I.T. and master level degrees from UC Berkeley and the Free University Berlin.

Hideaki Shirane (*shirane@daishinsha.jp)* is the founder of Daishinsha's Marketing Communication Technologies, a group/division that assists companies with human-centered research to gain a better understanding of their target customers. The group/division also designs marketing communication methods to align client business goals with customer needs.

David Siegel *(david.siegel@dray.com)* is Vice President of Dray & Associates, Inc. He provides various types of contextual user research in the US and around the world for a long list of clients. He integrates expertise in qualitative studies with a background in statistics and research methodology, a combination that often comes in handy in bridging the worlds of user experience research and marketing research, which helps answer the perennial question asked by social science students taking required stats courses, "When am I ever going to need this again?"

Astrid Pinholt Soendergaard MA in Multi Media. Network manager of NFBi (www.nfbi.dk). Business Understanding, Alexandra Institute (www.alexandra.dk).

Mary Ann Sprague *(MaryAnn.Sprague@xerox.com)* is a computer scientist and ethnographer in the Work Practice and Technology team, in the Xerox Innovation Group. She has worked in product development and research, including user interface development, and ethnographic research in color printing, production printing and the future of work.

Carey Stansbury collaborates with client teams to uncover meaningful opportunity through the use of qualitative research. She graduated from Syracuse University's Industrial and Interaction Design program, with a concentration in Communication Studies.

Shihono Suga *(suga@daishinsha.jp)* is an ethnographer at Daishinsha's Marketing Communication Technologies. Shihono has extensive experience introducing cutting edge methodologies in research and user-centered design to Japanese clients.

Suzanne L. Thomas is a research scientist working at Intel, US, researching emerging markets, from China to India to Mexico and beyond. She currently manages the strategic research team in charge of her group's strategic intelligence. Prior to this she worked in international ethnographic market research and marketing communications and spent too much time reading Hong Kong martial arts novels and watching PRC martial arts soap operas.

Lou Thurmon is Senior VP of Human Potential at Two West. As a certified change management practitioner, Lou works with clients to successfully embrace brand-building change internally, specifically in regard to employee engagement and in-depth organizational change. Lou oversees internal ethnographic fieldwork and analysis, organizational development business plans, communication plans and transition messaging.

Inga Treitler, PhD *(inga.treitler@gmail.com)* questions consumption … of food, of energy, of clothing ... the basics of survival. She works freelance under the name Anthropology Imagination in consumer products, communications, and healthcare. Earlier, at Oak Ridge National Laboratory, she conducted research in support of major federal decisions with potential impacts to environmental justice and to the environment. Inga holds a doctorate in cultural anthropology from the University of Illinois, Urbana-Champaign.

Jeff Ubois *(jeff@ubois.com)* is a former journalist focused on media, archiving and innovation for the Bassetti Foundation, in Milan, Italy, and Fujitsu Labs, in Sunnyvale, Calif.

Joan Vinyets Rejón, Ph. D *(joan@piecepie.com)* is Partner and Co-founder of A Piece of Pie, a Management Consultancy firm focused in Innovation, where he develops innovation projects for international companies. He holds a Ph.D. in Social Communication from the University Pompeu Fabra of Barcelona, a Degree in Anthropology from the University of Barcelona and a Master in Design from the Domus Academy of Milano.

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 healthcare and emerging workplace environments.

Jennifer Watts-Perotti, Ph.D. *(Jennifer.perotti@xerox.com)* is a Cognitive Engineer in the Work Practice and Technology team, in the Xerox Innovation Group. She has conducted ethnographic studies at Microsoft, Apple, NASA, Kodak, and Xerox. She is currently at Xerox, where she has studied packaging and production printing workflows, and the future of work.

Bari Wieselman Schulman

Susan P. Wyche is an industrial designer and social scientist pursuing a doctoral degree in Human-Centered Computing at the Georgia Institute of Technology.

Jan Yeager *(jyeager@cheskin.com)* has over twenty years of experience in the design field. She specializes in synthesizing complex data into visual models that enable shared understanding of complex issues and inform business decision making. She holds a BA in Anthropology from the University of Arizona, a BFA in Communications Design from Pratt Institute, Brooklyn, New York, and a Masters of Design in Human Centered Communications from the Institute of Design, Illinois Institute of Technology.

Jean Zelt (*jean.zelt@tns-global.com or jean_zelt@yahoo.com*) leads research studies that drive product development and innovation within the technology sector. She collaborates with designers, marketers, and strategists to increase the value of research throughout the development process. She holds a BA from the University of Pittsburgh and an MDes from Carnegie Mellon, and she is pursuing an MBA at Kellogg School of Management.

John Zimmerman is an associate professor at the Human-Computer Interaction Institute and at the School of Design, Carnegie Mellon University. He teaches interaction design and HCI methods with a focus on finding rich product opportunities. Before joining Carnegie Mellon University, he was a senior researcher at Philips Research. While at Philips, he designed interactive television products and intelligent devices for the home consumer market.

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