

エスノグラフィー道

The way of ethnography



EPIC2010

Ethnographic Praxis in Industry Conference

conference proceedings

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Tokyo, Japan



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The National Association for the Practice of Anthropology (NAPA) is pleased to welcome you to this 6th 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, www.practicinganthropology.org

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Conference Organizers' Welcome

As we enter into a new decade we want to focus on defining the practice from within, exploring different applications of ethnography in industry and defining as a community what the future will hold for us. We are delighted that you can join us at EPIC2010 in Tokyo, one of the most innovative, but also most traditional cities in the world, perfect setting for exploring, learning, discussing, reflecting and defining "the way of Ethnography".

道 Dō captures the sense of individual mastery that is achieved only with the help of a community and its rich heritage. 道 Dō implies a body of knowledge and tradition with an ethic and an aesthetic. 道 Dō is the "path" we have travelled and also the way ahead of us.

道 Dō in ethnography symbolizes the dynamic between ethnography's internal strengths (its essence, our values, its heritage, its rigor and disciplined approach) and its applications to the world (to enhancement of people's lives, to innovation, to transformation of industries, to business growth). It is the "path" we have come from but also the way ahead of us.

"Do" in English represents action, execution and optimism. 道 Dō in Japanese is a call for growth, maturity and proficiency, recognizing our past and visualizing the future. It is a vision of what's ahead of us.

EPIC 2010 features a wide range of ethnographic applications in industry, different "ways" forward. Ethnographic praxis in industry is global in scope, but adapted to different geographies (Asia, Latin America, Middle East, Europe, North America), different contexts (academia, business, NGO's, government), different industries (technology, healthcare, consumer goods, advertising) and different purposes (product innovation, strategy, interorganizational collaboration, communications, policy making).

Tokyo is the ideal setting for EPIC 2010. Tokyo is a world city, where innovation and tradition thrive. It is home to different 道 Dō, including sa Dō (way of tea), ka Dō (way of flower) and sho Dō (way of writing), and these 道 Dōs urge us to aspire for innovation within these traditions, see them as platforms for creative expression, and not simply assimilate them.

Our program features different aspects of Ethnography 道 Dō:

- **normativity:** Quality standards, best practices, proficiency/mastering the discipline, benchmarks, rigorous process/outcomes.
- **specialization:** Inclusion of new disciplines to enrich the practice, new contexts/applications of ethnographic praxis, new ways to do ethnography (online ethnography, etc.)
- **transmissivity:** Taking to new heights, exploring new territories, opening doors, spreading the value of ethnography, communicating results in new ways.
- **authoritativeness:** Tradition, recognition, acknowledgment /appraisal of the past, and solid foundations, deep reflection for inner strength and energy.
- **universality:** Optimism, human values, path towards the future, balancing science + art, growth, innovation to be prepared for what's next.

In Thanks

We owe particular gratitude to the attendees and presenters of EPIC 2010. Their participation, in its many rich and engaged forms, contributes to the discourse of ethnographic praxis in industry and is helping to build a vibrant and valued community.

Our deepest 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 tour a number of Masters' studios, and we are most grateful for opening their doors to us. We would also like to express our thanks to the 2010 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 advisory 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, Intel, Fujitsu, Microsoft, Osaka Gas, the MIT Press, IBM, in/situm, Hakuhodo, Denstu, Swinburne University of Technology, Microsoft Research, gravitank, infield design, Palo Alto Research Center, Battelle, Ethnography.Com, Razorfish, Pitney-Bowes, Daishinsha, Solutions Space, Idiom, and the American Anthropological Association and the National Association for Practicing Anthropologists for their contributions of people and financial resources. Without their support EPIC 2010 would not have occurred.

Please enjoy these proceedings and consider bringing the conversations they inspire in you as you read through to EPIC2011. We look forward to your participation in next year's EPIC conference!

Luis Arnal
EPIC 2010 Co-Organizer
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Simon Pulman-Jones
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Hiroshi Tamura
EPIC 2010 Co-Organizer
Hakuhodo

Local Organizing Committee Welcome

The start of this new decade marks an exciting departure for EPIC, as the 6th International Ethnographic Praxis in Industry Conference, moves beyond the west for the first time, and comes to Tokyo. Welcome to EPIC 2010 in the heart of Tokyo - in the aptly named Tokyo Midtown!

EPIC brings a groundswell to Asia, where ethnographic praxis is receiving serious attention as a vibrant approach to human-centric innovation. This year's conference also, I believe, sets a new agenda for the EPIC community.

The theme of this EPIC is “Dō: The Way of Ethnography.” Dō is a particular philosophy in Japan and Korea. While Dō suggests a system of mastery in a specific practice, it is not necessarily limited to classic skills acquisition. Rather, a master of Dō always ushers in breakthroughs to its tradition. A primary reason, I believe, is the cultural inclusion of contingency—the status of propositions that are neither true nor false under every possible valuation. Let’s consider Japan’s practice of enshrinement, for instance. Shinto practitioners worship a set of spirits called *Yayorozu* and, at the same time, take good care of shrines as religious sites. A shrine is built to appeal to deities but not necessarily to ensure those presences. Here, then, the center of Japan’s value system is often empty, and, therefore, its universality means that we infuse different propositions into the center in line with the times.

The other agenda of EPIC 2010 is thus that ethnographic praxis meets the emptiness. In other words, I expect a variety of propositions to be brought, vibrant discussions made, and a new ethnographic Dō constituted in the hollow. Let’s share the creative experience. Let’s add a page to the history of ethnographic praxis in industry together!

Hiroshi Tamura (Co-chair and Local Committee Co-chair)

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336 Contributors

346 Participants

Emineness – The Prime Image of Japanese Communication

KENYA HARA

MUJI and Musashino Art University

● 「EMPTINESS—日本のコミュニケーションの原像」

何も無いことを、無と考えるのではなく、
何ものにもなりうる可能性や
何ものをも受け入れられる自在性として
それを運用してきた伝統が日本にはあります。
メッセージをいかに巧妙かつ豊富に投げかけられるかではなく、
いかにより多く相手のメッセージを受け入れられるかを
コミュニケーションの基軸に置いているのも
そうした日本の伝統的な意思疎通の方法によるところです。

ここでは、自然の中に叡智があると考え、
その叡智と豊かな心の交流をはかってきた
日本のコミュニケーションの原理を解説します。
タイトルの「エンプティネス」は
西洋で生まれた「シンプル」とは対照的な概念で、
これを解説することで、茶の湯や生け花、
庭や簡素なインテリアなどを成立させてきた美意識を
浮かび上がらせてみます。
現代のブランド「無印良品」などの事例をも
その美意識原理の延長として紹介していきます。

Japan has a tradition that draws on regarding emptiness not as nothingness, but rather as the potential to become anything and the flexibility to accept anything. The traditional Japanese way of communicating is based not on how artfully or volubly one delivers a message, but rather on how many of their counterpart's messages they are able to take in. Here we find wisdom in nature, and I will describe the fundamental principles of Japanese communication which developed this wisdom and spiritual exchange. The emptiness of the title is a concept that contrasts with the western concept of simple, and in discussing these concepts I will highlight the aesthetic sense that formed, among other things, the tea ceremony, flower arrangement, garden and simple interior design. I will also present examples including the contemporary brand MUJI as extensions of the fundamental principles of this aesthetic sense.

Paper session 1: The Way of Industry

Izabel Barros, Curator

Hyper-Skilling: The Collaborative Ethnographer

WILLIAM REESE

WIBKE FLEISCHER

HIDESHI HAMAGUCHI

Ziba

*Time, budget, and resource pressures will impact ethnographic work into the foreseeable future. As “de-skilling” threatens ethnography—disrupting an integrated, holistic approach and output—we must seek new work practices. We have advocated and implemented an explicitly integrative model of collaborative practice, which interconnects the knowledge domains within a cross-disciplinary team to generate effective, powerful insights. This model, which we will call **hyper-skilling**, focuses on assembling knowledge and communication with other key perspectives such as branding and marketing strategy, historical analysis, trends forecasting, and in many cases design and engineering. Each plays a key role in determining a company's course of action. We also argue that the multi-disciplinary team model is well-suited to corporate settings and the conditions in which ethnographers are increasingly asked to practice. Intended or not, academic environments tend to promote the isolation of individual practitioners and the atomization of their work within specialized theoretical contexts. If instead these environments could be constructed to foster a team model, ethnographers will be better able to address challenges they face as practitioners in industry.*

INTRODUCTION: THE PROBLEM OF DE-SKILLING

Like many listeners, we took great interest in Jerry Lombardi's call last year to address the “de-skilling” of ethnographic labor in corporate contexts (Lombardi 2009). The main point of the argument was that ethnography—under pressure from the time and resource constraints that industry inevitably demands—is facing simplification, standardization, and reduction to piecework status. In the process, it loses the very qualities which industry values and seeks in ethnography, defeating industry's own objectives. Ethnographic practitioners meanwhile grow alienated from their labor. De-skilling demoralizes them and exerts a depressive effect on their creativity. Contextual understanding is eroded as discovery runs on an assembly line.

In this paper, we suggest that collaborative work offers an effective response to this challenge; not just collaborative work in general, but work that gives ethnographic practitioners an explicitly integrative role. In the context of innovation, the role ideally goes beyond situating observations in a cultural context, to the active coordination of input from multiple disciplines such as business strategy, communications design, product design and market and lifestyle trends. Each discipline has its own body of understandings that an ethnographer must interpret and articulate back to the innovation

effort. A road to practical effectiveness (and professional fulfillment) lies in recasting the role of the ethnographer as inter-disciplinary mediator.

Others have looked at collaborative ethnographic work before, particularly in the context of design (Dawson 2002, Wasson 2002, Sacher 2002). All agree that effective collaboration requires a great deal more than the collaborative “tools” of common workspaces, artifacts, deliverables, and the like. The real engine of effective collaboration is a common conceptual apparatus linked with integrative work practices.

In this paper we will build on that thinking and take it a step further. Collaborative concepts and processes are a resource for enriching ethnographic knowledge and skills. Considering our own experiences at a 25-year-old design innovation firm, we suggest that a way forward—and against the threat of de-skilling—is to re-assert the holistic perspective at the heart of ethnography, and to re-animate it in new forms of collective practice. We will call this approach “hyper-skilling”.

HYPER-SKILLING

De-skilling is a genuine industry concern. And yet consider for a moment the perspective of an ethnographic team that found itself experimentally re-crafting its members’ roles. Depaula, Thomas and Lang (2009) of Intel explain how they shifted into various strategic roles at the company to insure that their ethnographic work drove the innovation process and its outcomes. “As we narrate our own trajectory...from simply ‘informants’ to product and business strategists to dealmakers,” they write, “we come to realize...profound transformations in our ethnographic doing and knowing....We reached and experienced new forms of ethnography that the ‘founding fathers’ of this discipline would have never imagined.” (Depaula, Thomas and Lang 2009)

The roles played by the Intel ethnographers migrated in response to “pull” from the rest of their team. They had to learn about competitive market intelligence, business strategy, engineering, and more—not to replace these functions, but to effectively articulate their own contributions. The result was a transformation of their practice, creating a sense of increased relevance. Circumstances are never identical, but in essence that is the kind of experience we are talking about. In collaborative, interdisciplinary ethnography, what happens is not de-skilling, but hyper-skilling.

Simply put, hyper-skilling means finding and using clear lines of sight to the efforts of others working on the same problems from different perspectives. The term reflects a magnification of effectiveness that can occur when those sight lines converge in powerful new ways. At least two basic benefits emerge. For industry, hyper-skilling makes the findings of ethnographic practice more actionable, by including more of the relevant knowledge domains needed to solve a problem. For individual practitioners, it pushes them beyond their usual range, enriching and extending their interpretative skills, capabilities, and knowledge.

An innovation firm such as Ziba Design is a good place to explore the potential of such an approach because its focus is inherently integrative. It focuses on “experience design,” the premise of

THE WAY OF INDUSTRY

which is the tight organization of offers across multiple touchpoints in a consumer's experience. The business must express its purpose, identity, and value across these touchpoints in a meaningful and harmonious way or it will falter in its relationship with its audience. Clarity and consistency across the experience is essential. In all cases, the focus of these integrative efforts is the business' brand. Thus, much of the language at Ziba focuses on "authenticity to brand," both in our publications as part of our internal work practices.

"Consumers seek meaning and a brand they can trust," writes Ziba founder Sohrab Vossoughi. "They are creating ways to cut through the noise in search of products and services that resonate with integrity and transparency: in a word, authenticity." (Ziba 2007) Trust in brand is also more universally recognized as the key to experience integration. Brand character expert David Altschul writes for instance that, "A brand is like a character in the drama of its category...[One] is suspicious of any character whose motive is not clear." (Altschul 2009) Of course, the words "integrity and "integration" both derive from and share roots in the idea of wholeness; experience design must create interconnections to establish the perception of brand unity in consumers' minds.

That is why our work practice is becoming increasingly cross-disciplinary. It experiments a great deal with new integrative concepts and structures. Its teams strive to "connect the dots" to insure that a company's brand expresses its promise correctly across potentially disparate experiences, which include new products, physical retail environments, communications, online purchasing, customer service, and so forth.

Without integrative structures, such a firm would have to rely only upon individual genius to work across multiple, diverse consumer touchpoints with any success. And while there was a moment at which that may have been said of the company (indeed, it has been said [Byrne and Sands 2002:59]), Ziba numbers over 100 staff these days, with 10 creative directors orchestrating many teams across diverse projects. The genius model cannot dominate its practice.

A case study of our recent work with Chinese athletic apparel manufacturer Li-Ning illustrates some of the core conceptual apparatus and processes surrounding our current model of ethnographic work. Within it, a hyper-skilled approach has emerged vividly—albeit imperfectly at times, and still very experimentally. To set the stage for that discussion, some background on the project is needed.

THE LI-NING CHALLENGE

Li-Ning is the third largest athletic retailer in China. It originally approached Ziba for little more than a handful of youth-oriented designs. At the time (2007) it was 17 years old. Its founder, Mr. Li Ning, was a sports superstar who had won 6 medals at the 1984 Summer Olympics in gymnastics.

The company just wanted some of its clothing and footwear to be considered cool. Because at the moment, Li-Ning's wares were patently uncool. "When we look around," its Marketing VP said of the teenagers and 20-somethings he wished to attract in China, "none of these kids are wearing our stuff.

They're all wearing Nike and Adi (Adidas). So how do we get them to start wearing Li Ning? What can you do for us that will get them to pay attention?"

This wasn't something that a handful of new styles could cure. Li-Ning had been losing ground to the bigger players from the West for some time—since the company's beginning, really, back in 1990. It had done well enough in those early years just by providing quality at the right price, as a less expensive alternative to the Western giants. But now it was struggling as the market matured. The upcoming generation remained an enigma to the company, and its existing consumer base was getting more sophisticated. Local upstart companies were also posing a threat. Smaller and more agile, they exhibited a tremendous talent for copying designs and selling them fast and cheap, effectively squeezing Li-Ning from the value side.

Considering all this, we urged them to not worry about finding a new angle on cool, but to focus instead on making the Li-Ning brand relevant to a new generation of Chinese kids. What was Li-Ning about, other than being big, successful and Chinese?

Based on early reconnaissance at retail, kids in the stores seemed appreciative of Li-Ning's quality and consistency, and were glad to have a Chinese option. But they were not passionate about Li-Ning. Back at corporate headquarters, everybody seemed to have a different take on the brand's essence and character—not a good sign. Where was the sense of definition that could support a deeper engagement with the brand? The company had global ambitions, but it was hard to see how it could go anywhere until it defined its meaningful core. If Li-Ning's strength wasn't evident at home, how could it travel outside China?

Fortunately for them, Western brands were not yet fully connecting either. Nike, Adi, and Puma were selling prestige and a piece of America or Europe. But a new generation was clearly moving into place: Gen Y, the children of China's one-child policy, who had never known life under Communism. Surely these Chinese 20-somethings, contemplating a new era heralded by the Beijing Olympics and the Shanghai Expo had higher aspirations for sport in their lives?

Company executives acknowledged all of this reluctantly; especially problematic were the issues around brand definition. But despite the obstacles, they sensed that this was a rare opportunity to develop a unique relationship with the emerging generation. They rose to the challenge, aiming to become the first athletic retailer that understood the values of China's emerging youth market, and to build a new product strategy aligned with that understanding.

For Ziba, taking this on meant building an entirely new understanding of modern Chinese identity as it related to sport. Few models existed for the crucial 14-25 year old group, and those that did were too simplistic to be useful. If we were to help, we would have to start from scratch. And we would have to find answers fast, compressing into a matter of months a study that justified years of dedicated effort. "We want to stand on the shoulders of giants," said the CEO on deciding to move forward with the project. "What western sports companies took 60 years to achieve, we will need to do in six."

HOW TO GET HYPER-SKILLED

Hyper-skilling, as we have said, preserves and enhances ethnography's value to industry and the anthropology/ethnography profession in the face of just such constraints. We were able to realize this to a significant degree in the ensuing study. Where we could not, it helped us better understand the ideal. In what follows, we will describe the core elements: **a collaborative definition of insight, team integration around the consumer worldview, intellectual resource management, and envisioning the endpoint upfront.**

Insight = intersection

The crucial ingredient of a hyper-skilled team is conceptual rather than human, in particular the concept of "insight." Insight is not a precursor to an individual "epiphany" (Wilner 2008), but the ultimate distillation of relevant knowledge needed to solve a problem. From here on we use the word as a term of art, reserving it for special use and building other terms and concepts around it.

To qualify as an insight, an idea has to have two essential qualities. A) It is **actionable**, or potentially actionable. One can demonstrate it could reasonably shape a product or service or space. B) It is **integrative**. It can deliver something important from all key perspectives.

For example, it is a fascinating and rich observation that when given the projective task to draw the Li-Ning brand as a person, people drew an image of a schoolgirl or boy or someone with relatively small stature and power. Li-Ning meant potential. It meant latent growth, an ascent that was expected to be gradual, and hinted at qualities of innocence and goodness. But that was not an insight. The related insight was that Li-Ning can help people "define themselves through their game." This formulation reflects a shared interest between Li-Ning and its consumers in self-definition and progressive self-reformulation, a concern which is much closer to product and communications concepts than the observation about how the company is perceived. It "speaks the language" of brand, design, and consumer worldview at the same time.

An idea whose potential actionability cannot be readily demonstrated gets put in the parking lot of interesting observations. It is neither ignored, killed nor erased, but it doesn't make it to center stage either, where it could be identified, memorialized and carried through as a central hypothesis for innovation (through a wiki, for example, or other running documentation of core project hypotheses—more on that in a moment). An idea also won't make it to center stage if it represents only one disciplinary viewpoint without demonstrating linkages to the others, including at a minimum, to the consumer worldview. We can now describe how that role began to assume a special place in the collaborative process.

Consumer worldview = integrator

The composition of the team is a critical design problem in its own right. We did not envision sending a series of lone ethnographers out to spend time with individual research subjects. We identified the core "lenses" needed to produce insight and then found people who could use those lenses and think in the ways required. There were typically six such lenses: **Business Strategy**,

Communications Design, Product Design, Cultural Mediation, Consumer Worldview Understanding, and Trends. The driving idea was to turn a multi-disciplinary team into an ethnographic task force. Thus the term “ethnographer” became a confusing misnomer, and we avoided it.

We found ourselves using the term Consumer Worldview Investigator. The specific individual role of such an investigator was to draw upon theories of culture, cognition, and social order to identify key shared understandings, and to help determine their longevity. The role also drew heavily on cultural mediation to help understand, interpret, and prioritize peoples' words and actions. (The cultural mediators primarily acted as simultaneous interpreters, recruited for their strong general understanding of Chinese culture and contemporary society, and their demonstrated ability to help naïve teams work effectively in the field.) As anthropologists have traditionally done, the Consumer Worldview Investigator worked closely with these mediators, tapping into their expertise to develop culturally appropriate observations that could lead to insights. Together they explored inner worlds—such as those around movement and styles of personal expression—whose contours were foreign to American and European team members.

We composed small field teams out of the six lenses, so that team members could gain exposure to a variety of viewpoints and regional settings. The basic field unit was a three-person team: a Consumer Worldview Investigator, a cultural mediator, and a designer or strategist. Some team members had dual training which let them switch spectacles.

Given how critical consumer relevance is at every juncture, significant pressure arose to extend a consumer worldview focus into other disciplinary spaces (business strategy, communications design, product design, and trends). And these lenses began to refract one another, casting a shifting light across the emerging opportunities taking shape.

Instances of such refraction were innumerable. There was a competitive space for the brand (strategy) around altruism/we-thinking/community: what could that really mean (consumer worldview)? What did altruism in sport feel like, look like, and sound like to kids in different towns and cities (trends, communications design)? What were its key principles, and its colors and textures (industrial design)? How much variation was there in its expression (anyone)? Which of the variations was closest to what Li-Ning could authentically offer? Connecting to young women seemed an obvious business opportunity (strategy), but what were women's aspirations (trends, consumer worldview)? Style was one thing, but sport for life was a very recent concept (trends). Were young women as ready to express themselves through sport as the young men seemed to be? And so on. All questions framed by other lenses intersected with each other repeatedly and in unexpected ways.

In this generative environment, the Consumer Worldview Investigator—or “ethnographer-ethnographer” for those who cannot live without the term—came to play two roles. One was consumer worldview exploration; the other, exploratory integration. Worldview specialists interviewed designers to understand what struck them as significant. “I'd see something from a design perspective,” said an industrial designer, “and then [the worldview person] would get me to say what I saw.” Moments after a hang-out, intercept or immersive “day in-the-life” consumer visit, the designers,

strategists, and worldview people would speak into a camera together, riffing off what each other had seen and creating terse video syntheses on the fly. The worldview specialists then analyzed these for additional clues on how to synthesize and help generate insight.

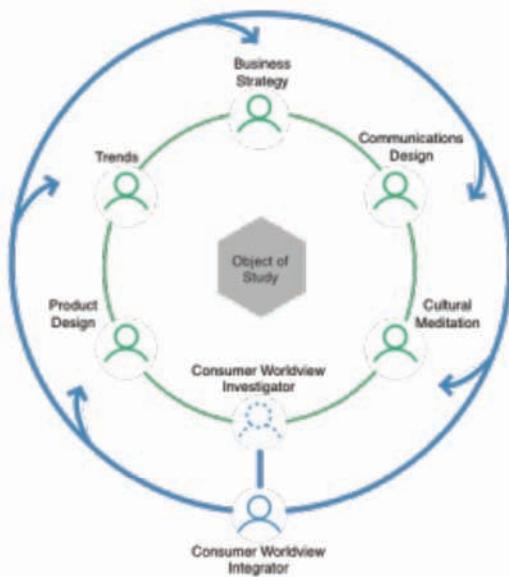


FIGURE 1. A HYPER-SKILLED ETHNOGRAPHIC TEAM. *The Consumer Worldview Investigator insures consumer relevance across multiple perspectives.*

For despite whatever anyone else brought to the table, the consumer worldview investigator was accountable to the requirement of consumer relevance. The task of generative integration typically fell to those most attuned to matters of human relevance, and best able to articulate them. (Note however that in its executive aspect the business strategist held authority for integration. The key design stories had to work across apparel, shoes, and gear, for instance, and it fell to the business strategist to make sure all those pieces ultimately fit together.) The above diagram illustrates the relationship of the Consumer Worldview Specialist to the hyper-skilled ethnographic team.

Intellectual resource management

Wasson noted in her study of collaboration between designers and researchers at E-Lab (2002:81) that “researchers were often intrigued by discoveries that were tangential to the client problem.” Often in anthropologically-minded consumer work, a high tolerance is exhibited for discrepancy between a

researcher's perception of the value of his or her observations, and the client's. That discrepancy can be costly, not just in terms of time and budget (which are considerable), but in the creative energy and momentum of the interdisciplinary team. Wandering afield on an intuition of rich discovery is critical: a prerequisite to the understanding and insight which are the creative engines of research. Yet the collaborative innovation team must have confidence that such exploration will be relevant—if not frequently, then in stunningly surprising ways.

Accordingly, there is an emphasis on frequently building out possible answers, or in “prototyping” possible results (to use design-speak), so as to increase the likelihood that the phenomena uncovered will in fact prove useful rather than merely interesting. How broadly do we need to reach into adjacent realms to solve the problem? Weighing issues on the table, how rich must the contextual understanding be? Why? If we could go deep on a primary issue and spend just enough time on a more peripheral issue to see whether it bears fruit, creating a contingency plan in case the peripheral issue later proves critical, are we likely to have learned enough to find valid patterns? Team members apply such relevance criteria carefully, so as to not to close doors on potentially rich areas; they also do so persistently.

Endpoint upfront

Let us take things for a moment out of sequence. When a team first forms, the sensible thing is to solve the problem—immediately. Or at least form a hypothesis. The practice in the hard sciences of articulating hypotheses before conducting an experiment is rarely followed in ethnographic work, owing to the idea that its process is inductive rather than deductive. This is a great shame, as a hybrid approach usually works better for teams. Stating hypotheses clearly carries little risk as long as a team accepts that they are provisional and that the team's job is to explore rather than test them, and to evaluate, update, or discard them at key checkpoints.

The advantages to this approach are immense, particularly for a collaborative team which must concentrate its efforts in time. Imagining at the outset what the answer might be clarifies the nature of the collective goal, revealing knowledge gaps and weak assumptions. It helps team members understand their likely contributions. And it establishes benchmarks for tracking future progress toward insights.

Hypothesis tracking was a deliberate component of the work for Li-Ning, utilizing helpful collaborative technologies, specifically a **blog** and a **wiki**. If the blog was the group's communal memory, the wiki was its collective understanding. The research blog was intentionally designed to be an organically messy, creative jumble of ideas: a forum for teams to upload great photos, write up rich, meandering thoughts, comment on nightclubs, or shout-out (or vent) to another team member in a different city. It was a very loose, dynamic, daily project.

The wiki on the other hand, was the repository of key project hypotheses. It formed a collection of curated, effectively “proven” observations that helped us to systematically track and institutionalize our knowledge. Moderated by the business strategist in an executive role, it included regular updates to our hypotheses about the patterns in people's behaviors, attitudes, and values. If something changed in

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the wiki but someone on the team disagreed with the new formulation, that disagreement had to be resolved for the team to move forward. This allowed us to effectively build on what was known using new probes and revisions to fieldwork protocols.

The hypothetical product line strategy we envisioned for Li-Ning in those early days bore little resemblance to what we eventually developed after months of research. But marking and memorializing that understanding prompted questions about the competitive landscape, perceptions of the Li-Ning brand, Chinese political history, changes in the history of sport, and a prodigious (but not infinite) set of other issues. The team could see we had a lot to learn if we were to develop a product strategy past the crude skeleton from which we began.

Insight revisited

As previously stated, an insight is a distilled representation of the relevant knowledge needed to solve a problem or make something happen, and a precursor to potential innovation. But what form does it take? Images and diagrams increase its value and ultimately embody it, but its textual form is generally a strong, simple, statement that is rich with multiple potential meanings. Such polyvalence is critical because it lies at an inter-disciplinary confluence. All must be able to understand, interpret, and draw inspiration from it.

Consider for a moment the following statement from the work with Li Ning.

“For Chinese youth today, sport is not about winning, but about how to play.”

This formula constitutes an insight in the technical sense because it caps a tight convergence among the **six critical perspectives** (or “lenses,” described on page 7). From Chinese cultural and consumer perspectives, sport was not about winning. On public courts the shouts of “good shot” and “try that again” told us sport in this scene was not about “ball hogging” and “hot-dogging” (as in the US and many other places) but about building relationships and enriching experience. The phrase “how to play” signified that what mattered for kids in urban China in 2007 was growth, both personal and collective. It also has legs from a product design perspective. “How to play” makes for a product-use mindset, and for positing usage goals, which can drive ideas for making the thing: “Do I need to be strong, or quick, or controlled for this game?”

A trends perspective suggests that the theme of collective and personal enrichment may be temporary. It holds for Chinese youth in of 2007, and certainly for Gen Y, probably into their next decade. But its experimental expressions could subside in a few years and Li-Ning needed to allow for that.

Finally, recalling our quick treatment of the competitive landscape earlier, the idea that sport is “not about winning” does much from both strategy and communications perspectives. Nike isn’t doing this; nor is Adidas; nor is Puma, etc. Nike’s brand, for instance, is very definitely about winning. “You don’t win silver; you lose gold,” went its ad campaign for the ‘96 Olympics. Adidas is about geek-tech performance. Puma is about lifestyle. But so far, nobody has been selling a versatile “how to

play,” implying potential for unique positioning. Such convergence around relevance and potential market significance is a primary distinguisher between true insights and simple observations.

IMPLICATIONS

We conclude with a set of implications for the work ahead. Reflecting on successful collaborations, Maria Bezaitis of Intel’s People and Practices Research Group reminds us that, “Great stories didn’t emerge from brilliant individuals... they were borne from practice.” (Bezaitis 2009:156-7) At the same time, there’s a training problem. “Practice is personal,” she observes. “To ask young social science PhDs fresh out of world-class graduate programs and post-docs...to stop working in the way they are used to is arrogant and even disrespectful.” (2009:158)

No doubt this is true for many. But other possibilities exist. For ethnographers committed to theory but wishing to work in a corporate context, new modes of practice are necessary. It is perhaps no affront to ask people to find new ways to work if they grow in the process, and if like so many anthropologists receiving on-the-job training in industry, they understand anew what they can achieve with ethnography (or might not achieve, as they set anthropological theories against other explanatory and interpretative ones to see which prevail).

Unlike medicine, engineering, and other hard sciences where concrete applications justify their existence, strong anthropology/ethnography (or "A/E"-- a useful contraction from Baba [2005]) is with some notable exceptions still fundamentally bred to remain confined to academia. The academies nurture an ethic, worldview, and work style that have tremendous potential value. But for ethnographers who will eventually choose to work in a corporate context, it is important to understand that academia's approach is only one side of the overall practice. As Wilner remarks, the identity of the anthropologist tends to be “an intellectual one, privileging academic inquiry as an end unto itself.” (Wilner 2008: 294) More generally, the academic “habitus” in which most theory-driven anthropology continues to be learned and practiced (Bourdieu 1984) exerts a continuous pull on corporate ethnography in ways that are both constructive and destructive.

The constructive influences of the academic approach are amply evident, including enrichment of theory and experimentation in pursuit of knowledge. Destructive influences emerge when considering something like collaborative practice. Intended or not, academic environments tend to promote isolation of individual practitioners, and atomization of their work within specialized theoretical contexts. Consider for instance the profound statement made about the nature of anthropological practice by the fact that grants and fellowships for graduate fieldwork normally go to individual practitioners, not groups. Work is understood on a timeline derived from university calendars and grant schedules rather than project outcomes. Rewards depend more on continuity with intellectual ancestors than demonstrations of empirical success. The type of knowledge that counts as relevant places paradigm shifts and critiques of existing traditions over relevance to solving social or market problems.

A/E can build collaborative work practice back into theory-driven academic programs, creating an appetite for hyper-skilling among the best theoretical minds. But to do so it must look to other fields

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for appropriate models and inspiration. Design programs at research-aware institutions such as the Illinois Institute of Technology, Carnegie Mellon, Savannah College of Art and Design and Rhode Island School of Design are ahead of anthropology programs in the US in their emphasis on collaborative practice. But even industries without a strong connection with innovation practice—or perhaps most especially these industries—have much to teach current and future generations of ethnographers.

Wherever an expertise must enhance and empower allied perspectives, it will face analogous challenges. These include embedded information management (corporate librarianship) and case management. Consider for a moment the similarly challenging role of “hospitalists,” who are physicians specializing in the full spectrum of inpatient care at hospitals. Their charter is to decrease costs without reducing quality of care in a high-stakes, immersive, totally integrative practice (Wachter and Goldman 1996, 2002). They must coordinate their activities with those of a number of specialists and insure that their orders do not duplicate efforts by those specialists (read “research protocols”), while taking care not to overlook any diagnostic procedures or charting information that may have a bearing on success (read: historical, cultural, marketing, strategic perspectives). They then offer solutions (read: business recommendations) that cannot create any adverse events or toxic drug interactions (i.e., brand or business strategy conflicts, or implementation problems).

Ethnography’s dō (loosely translated as "way of doing") is holism: connecting disparate socio-cultural data and seeing greater meaningful patterns. Turning its gaze to business perspectives and business practice, it finds new patterns there, too. Hyper-skilling creates relevance and establishes new frontiers for the practice by exploring the eight lines connecting consumer understanding to other perspectives for innovation. In this way, it can reach past merely representing current worldviews to map these representations across the diverse perspectives of the businesses on whose success it depends.

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Back to the Future of Ethnography: Internal User Research at a Consumer Internet Company

ANDREA MOED

Yahoo!, Inc.

The Advertising Products research team at Yahoo! is building an internal research practice within an organization that is user-centered, but optimized for consumer product development. While our fellow researchers observe millions of consumers on our websites, we study our coworkers: their experiences with the tools of online advertising, and how those experiences shape the service that our advertiser customers receive. Adopting methods such as task-oriented interviewing and extended observation, we are reconnecting with a tradition of ethnographic inquiry in the workplace that is largely unknown at consumer Internet companies. This paper describes how we have re-learned and built company support for this approach. I describe our work with Yahoo!'s advertising sales and operations staff, highlighting the structural challenges of conducting and applying this research. I conclude by reflecting on how qualitative research can help a company bridge the gap between product design capacity and the ability to produce great services.

INTRODUCTION: YAHOO!'S OTHER USERS

As one of the world's most recognized internet companies, Yahoo! is known for its large and broad user base. In press coverage and in its marketing materials, Yahoo!'s users are identified as global, representing a range of ages and backgrounds, and numbering in the hundreds of millions. Yahoo! has long valued and aspired to a deep understanding of these users, attained through investment in many forms of research. User researchers—variously called Design Researchers, User Experience Researchers, Customer Insights Researchers and recently Insights Researchers—have worked at the company since at least 1999.¹ UERs (as the author and her researcher colleagues will be called hereafter) are responsible for the qualitative and behavioral study of Yahoo!'s users and potential users, with User Experience Designers (UEDs) and product managers as our primary stakeholders. Most research done by UERs is focused on those legions of consumers who come to Yahoo! sites to check their email, read the news, share photos, and do many other things. The methods employed are various and constantly changing, but they include lab-based usability testing and eye-tracking studies, field visits, focus groups and remote qualitative research, concept testing and other participatory methods, and survey research. UERs also work together with market researchers and web analytics specialists to build insights from qualitative and quantitative data. Through extended engagement with a specific Yahoo! site or product, the typical UER develops deep knowledge about their site's users: everything from the demographics of the user base, to their perceptions of competitor sites, to the needs, aspirations and goals they typically address through their use of the site.

Important as they are, however, most consumer users provide no direct revenue to the company. The vast majority of revenue comes instead from the advertisers who run marketing campaigns on

¹ Email exchange with Tracy Beasley, June, 2010. Beasley has been employed at Yahoo! since 2003 as a participant recruiter, and worked with some of the first UERs.

Yahoo! and partner sites (Yahoo! 2009, pp. 30-31). This much smaller, but still diverse group includes individuals posting classified ads, small business owners, search engine marketing professionals, Chief Marketing Officers at companies of all sizes, and a host of brand managers, strategists, creatives, producers, media planners, buyers and analysts at thousands of corporate marketing departments, advertising agencies and agency holding companies. The most lucrative advertisers are global corporations, who may pay Yahoo! millions of dollars in a year.

Consumers experience Yahoo! as a network of websites and communication systems—essentially, online software *products*. For major advertisers, however, Yahoo! provides a *service* whose touchpoints can include sales calls and pitches, expert consultation, custom configuration of advertising programs, on-demand technical support, creative services, data feeds and even conferences and events. Yahoo! software interfaces also play an important role in this service, but in the case of large display advertisers, the interface is not directly used by the customer. Rather, it is experienced by internal users: Yahoo!'s front-line sales and advertising operations staff, who book orders for advertising on behalf of customers and deliver the ads on Yahoo! and partner sites.

Yahoo!'s Advertising Products UER team, which includes the author, was formed in 2006 to inform the design of advertisers' experiences.² As with other UER teams at Yahoo!, the primary objective of this team was to improve users' experience of Yahoo! software by developing and sharing insights about its users—whether these users were external to Yahoo! (as with Yahoo!'s self-service products) or internal. This definition of our work has two implications, which frame the discussion here: First, we are the only UER team at Yahoo! to regularly conduct studies of Yahoo! employees, as well as advertisers. Second, while our mission is to improve the entire experience of advertising with Yahoo!, we are primarily responsible to a product organization that owns the software component.

The first section of this paper provides context about the business of online advertising, and reviews the methods the Advertising Products UER team developed to study the online advertising domain. Through these methods, UERs came to engage internal users as partners in product development. The second section of the paper looks at the limitations of this partnership and of a product-based approach to the design of the advertising user experience. This discussion concludes with the team's emerging conception of design research in our domain, as a process that informs every touchpoint in a continuous and coherent advertiser service.

APPROACHING ONLINE ADVERTISING

Yahoo! sells many types of internet advertising—including search advertising, classified ads, promotional services, and recruitment ads—but the work I will discuss here focused on the display advertising business. Display ads consist of images, interactive graphics and/or video rather than text, and are typically more expensive than text ads. Unlike most buyers of text ads, display advertisers typically have sufficient advertising budgets for multi-media campaigns. That means that Yahoo! competes for their dollars not only with other online publishers, but with print, broadcast and outdoor

² Conversation with Michael Bartholomew, July 2010. Bartholomew was one of the first UERs to be part of the Advertising Products team.

media. Compared to these ‘traditional’ forms, online advertising suffers from the perception that it is poor at communicating an advertiser’s brand and reliably reaching desired audiences (Knoll 2010).

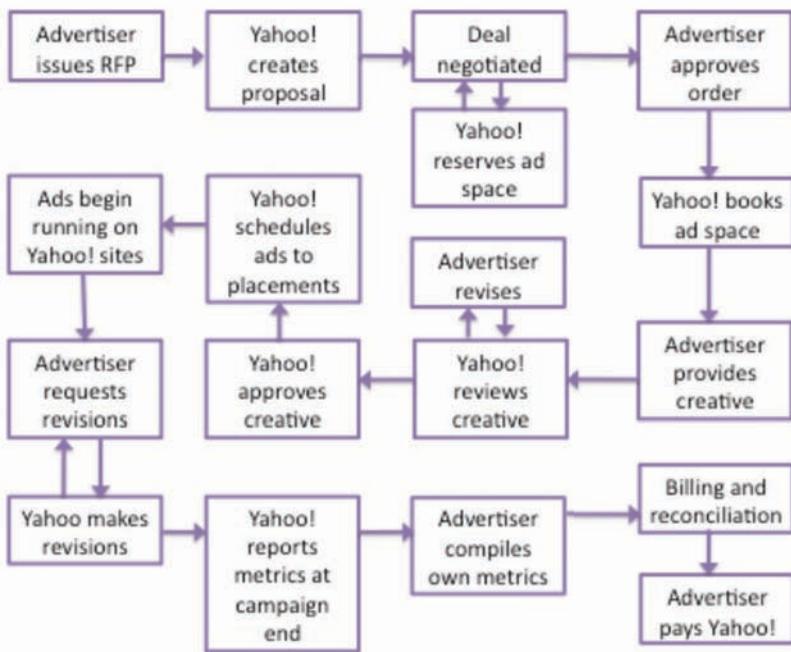


FIGURE 1. High-level process description of a display advertising campaign. Diagram created by the author based on research by Yahoo! UERs Frances Karandy and Michael Bartholomew.

Figure 1 describes generally how a major advertiser or its ad agency runs a display advertising campaign on a designated set of Yahoo! websites. Large advertisers running such campaigns typically work with two Yahoo! salespeople, an Account Executive who manages the overall customer relationship, and an Account Manager who works with the customer on specific online ad campaigns and places orders for advertising. In addition, accounts are assigned a Media Delivery Coordinator, who is part of Yahoo!’s Ad Operations team. This person’s job is to receive the creative materials that will be used in the advertisements, and to make sure the ads appear on our websites to the consumers, at the frequency, and in the time frame specified in the order placed by the Account Manager. To do their jobs, Account Executives, Account Managers and Media Delivery Coordinators rely on software tools developed and maintained by Yahoo!.

Beginning in 2006, Yahoo! made significant investments in redesigning these systems, as part of the introduction of a new online ad-serving platform, now known as Apt From Yahoo!. UEDs and UERs have taken part in these efforts from the start, though our activities have changed as the Apt

strategy and target user base have evolved. Our current objectives are to improve our coworkers' and partners' experience of the systems they are obliged to use; to increase Yahoo!'s efficiency and accuracy in booking, serving, optimizing and measuring online ad campaigns; and to make it easier for advertisers to do business with us and to shift ad dollars from traditional media to our network.

With training and background similar to that of other UERs at Yahoo!, our team had to climb a significant learning curve to understand the specific research requirements of building software for online advertising sales and delivery. Most of us needed to learn the fundamentals of the ad business, the rapidly evolving role of digital advertising, and the conditions specific to online ad sales at our company. We learned partly by taking industry training and consulting various secondary sources, but as one might expect, our richest sources of information were the Sales and Ad Operations staff themselves, along with their trainers and managers.

It was during this ramping-up phase that our overall approach to the research took shape. Our methodology differed from that of consumer-facing UERs at Yahoo! in three important aspects:

- We created *business process models*, to capture our synthesis of findings from users in different jobs.
- We did *workplace observation* due to the intense and goal-oriented nature of system usage and the need to capture variation in use cases.
- Our small pool of internal users—a few hundred people in the U.S.—and the need for iterative, expert feedback led to *repeated engagement with key informants*.

In short, we adopted ethnographic and business analysis methods that were characteristic of systems design research during its formative years at the IT workplaces where it began, but that have faded from use in design research at consumer internet companies like ours. This approach has brought us unique insights, but also challenged common understandings of the place of research in software development at Yahoo!, held by both our stakeholders and our research participants. In the next three sections, I will describe the practices we developed, and the successes and setbacks that followed.

Business Process Modeling

The purchase of online display advertising is a complex transaction, occurring in a fast-moving marketplace: both the ads and the spaces they fill are intangible and subject to frequent change. Every ad campaign involves a diverse group of actors over time, working on behalf of the advertiser, their ad agency, or the publishers of the ads, in this case Yahoo! and its partners. No one person, or even company, has a complete view of the process. To develop a thorough understanding of how display ad campaigns happen on Yahoo!, our team gathered data from dozens of advertising professionals inside and outside the company, in the form of semi-structured interviews and workplace observation (see next section), over approximately 18 months.

As the data accumulated and the complexity and variation in the process became evident, process modeling emerged organically as a way to synthesize our findings and make them legible to stakeholders in UED, product management and engineering. UERs created several flow diagrams

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depicting the digital ad campaign ‘lifecycle’, from the pre-proposal stage through billing. Each model was based on field research within a particular organization (or type of organization): Yahoo! itself, a partner publisher that sells advertising on Yahoo!, or advertising agencies that develop online ad campaigns. Consequently, the diagrams focused on the work being done within each organization and the immediate inputs and outputs of that work to and from others. Figure 2 is an excerpt from one of these diagrams.



FIGURE 2. Initial page of a two-page workflow diagram created by UER Michael Bartholomew and UEDs Summer Bedard and Eric Thomason, showing the steps required to book and fulfill a guaranteed-placement display ad campaign on Yahoo!, from Yahoo!'s perspective. Activities shown above the timeline occur at Yahoo!; those below the line, at the ad agency working on the campaign. The complete diagram follows the campaign through execution, optimization, reporting and billing, depicting a total of 33 steps. This diagram and the processes it describes are the property of Yahoo! and are reproduced here under permission of the owner.

Diagrams of this sort are more visually complex than the typical user research presentation at Yahoo!, where less data-dense PowerPoint decks are standard. This presented an information design challenge: depicting both the overall campaign lifecycle and all the component workflows; notating actors and software systems involved in each step; and overlaying trend data (such as the current proportion of advertising orders requiring revisions). UERs collaborated with UEDs to develop representational schemes like the one in Figure 2, which succeeded in simultaneously showing the sequence, the locus, and the principal actors in all activities.

Presented to our stakeholders in slide decks, handouts and posters, these diagrams were immediately useful as a way of demonstrating UERs' mastery of complex advertising business processes. This step was essential given the purpose of our research: to inform the design of a new software suite that would consolidate the functions of multiple existing tools. Only by documenting the current state of things could we gain the authority to make recommendations about the new system. In the longer term, however, our process modeling work allowed us to participate in a larger discussion about the display advertising market, taking place in sales operations, customer advocacy and at executive levels, as well as among our immediate stakeholders.

Many advertiser-facing employees had heard from customers that online display advertising was difficult to understand and to buy, compared to both traditional-media advertising and online text advertising. Furthermore, salespeople had complained that bureaucratic and administrative overhead made it difficult to sell in a way that was responsive enough to customer needs. One executive labeled this pervasive difficulty as "friction" in the display market—a term that subsequently gained currency across the company. Implicit in this term was the view that if the friction points could be located and smoothed out, display advertising sales would increase. Indeed, this is the premise of business process modeling as practiced by systems engineers: examine the entire process, identify the poorly performing parts, and target them for change (Havey 2005, pp. 3-8).

Because the UER team used ethnographic methods to gather data for our models, our conclusions were very different. In interviews and observations of online advertising professionals and through secondary research, we learned that there were many types of uncertainty inherent in the business: At the time the ad space was booked, neither the buyer nor the seller might know exactly how many times the ad would be shown, which web pages or application views would display it, what would appear alongside it, how many people would see it, what portion of them would be members of the advertiser's desired audience, and how much the campaign would cost, let alone how many new customers or sales it would yield.

In field visits to Yahoo! and partner offices, our team observed the work Yahoo!'s sales and ad operations staff did to reduce customer uncertainty. This work leveraged proprietary technology, such as ad targeting logic that can restrict an ad to site visitors of a certain gender, occupation or consumer interest. It also made use of rhetorical tools: Salespeople presented Yahoo! as a "trusted partner" in marketing and tried to cultivate a "consulting relationship" with advertisers. These workers experienced their greatest dissatisfaction with Yahoo!'s ad booking and delivery system when it prevented them from offering certain assurances to customers. For example, in an interview conducted by UER Lee McNeill, one salesperson attributed a lost sale to the failure of an inventory forecasting function that determines how much ad space will be available for a future campaign:

I lost \$15K in commission because [the system] couldn't deliver...[it] was not predicting inventory and my client felt it was unreliable. (Sales representative, Yahoo! partner publisher.)

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Drawing upon this fieldwork, McNeill and UER Frances Karandy created a process model that incorporated several extra steps taken by salespeople in this organization to assure clients that the exact ad space they wanted would be available. These steps included creating a “fake” order during the proposal stage, in order to locate inventory in the system that could then be offered to the advertiser.

Similarly to the salespeople, Yahoo! ad operations staff expressed an overwhelming need to know in advance how the system would behave. In their case this knowledge was needed in order to head off any technical problems that could arise with the “creative” (that is, the images or media files) that the advertiser provided. Even though they were not involved in negotiating the sale of the advertising, they reported feeling responsible for executing the ad campaign to the specifications promised by the salespeople. They were particularly dissatisfied with technical limitations in the ad previewing tools, which did not catch certain issues that could cause an ad to display incorrectly. A Media Delivery Coordinator the author interviewed described these failures as a series of harsh lessons: after placing confidence in a diagnostic tool that then fails, “you learn never to do that again.”

While evidence of specific failure points—such as those with inventory forecasting and ad previewing—did emerge during our interviews and observations, we also discovered cumulative effects that could not have been predicted by these instances alone. Overall, the existing software system did not support the relationships that our sales and ad operations staff aspired to have with customers. This suggested certain foundational principles for the system redesign, such as enabling our sales and ad operations staff to reduce customer uncertainty and build trust in their expertise and in our advertising service.

The discipline of process modeling was critical to developing the insights and recommendations the team produced. At the same time, it was a challenge to advocate for these recommendations using the workflow diagrams that were generated. Each of the diagrams commanded stakeholder attention by revealing a proliferation of steps that prolonged the time required to get a sale made or a campaign run, with evident costs for the business. In the months after Bartholomew presented the workflow diagram excerpted in Figure 2, his “33-step process” became known among stakeholders as emblematic of a situation that needed fixing. What was harder to convey was that a better process would not merely consist of fewer steps, but would embody design principles that aligned the system with its users’ ideals of customer service. The complexity of the process models made the case for change, but this same complexity undermined the team’s recommendation of comprehensive change by encouraging stakeholders to think about the most accessible, piecemeal improvements—or, to use a common expression at Yahoo!, “the low-hanging fruit.”

Workplace Observation

Observational research at work sites is a core activity of applied ethnography. In the information systems context, best practices in workplace ethnography have been a rich topic of discussion among practitioners since at least the early 1990s, with the publication of pioneering work on ethnographically informed systems design (for example, Bentley et al 1992). Rarely, however, have these studies and discourse influenced the practices of user researchers at large internet companies. A notable exception is the Contextual Design methodology developed by Hugh Beyer and Karen Holtzblatt. In their 1998

book *Contextual Design: Defining Customer-Centered Systems* and in several related publications, Beyer and Holzblatt instruct would-be practitioners in a research process that blends ethnography and business analysis, and allows team members of diverse expertise to collaborate in developing and acting upon insights from the field.

The years following the book's publication coincided with the first internet boom. As the applications of online systems grew along with internet businesses, Contextual Design provided web development teams with a systematic way to derive product requirements from direct encounters with users. Today, Contextual Design—especially its user-led observation sessions and group synthesis of data through affinity diagramming—is considered an essential part of the user researcher's toolkit (Kuniavsky 2003, pp. 160-192). For example, Google has shared stories of field research on the contextual inquiry model in its official blog (Russell 2008).

In recent years, however, contextual inquiry and other field study methods have been applied increasingly selectively at Yahoo!. Some reasons for this are practical. Shorter software development cycles create pressure to produce findings more quickly. User bases have become more global while travel budgets have been reduced. More to the point, different research techniques have evolved that may be better suited to studying consumer website use. Remote and asynchronous methods, such as diary studies, capture user impressions of interactions over multiple sessions that may share an overarching goal or theme. Eye-tracking studies delve deeply into the micro-level of user experience: the second-to-second distribution of a website visitor's attention. Any of these methods may be combined with retrospective interviewing to focus on the experience of specific sites or tools, rather than the holistic experience studied through contextual inquiry or ethnography.

The Advertising Products UER team is one of the few at Yahoo! that employ field research as the predominant means of data collection. This is largely due to the team's current focus on the experiences of internal users in the workplace. As mentioned, Yahoo!'s sales and ad operations staff is a relatively small population. They are concentrated in a few locations; they do stationary, desk-based work that involves intensive use of the software systems we are researching. Furthermore, much of the users' work involves real-time collaboration with colleagues, which can only be captured in the field. For example, in a recent field visit, the author observed an impromptu problem-solving session among several colleagues located at two offices, after a software component stopped working:

Oh no, [a coworker at another office] is having that syncing problem... Did loading metadata work for you? (Media Delivery Coordinator, to another MDC in an adjacent cubicle)

In other instances, insights into the work process came from observing the way users employed personal information management applications on their computer desktops, and paper notes, calculators and other objects on their physical desktops, to organize their tasks in ways not supported by the ad booking and delivery system. For example, the author observed one Media Delivery Coordinator who used email "flags" of five different colors to indicate different message content, with yellow, the most prominent color, as a signal to "do something."

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While visits like these yielded valuable data, they changed our customary relationship with participants and stakeholders. Over time, it became clear that internal user observations introduced an element of trust and implied obligation that is not part of the relationship with external research participants. When we visited Account Executives, Account Managers, and Media Delivery Coordinators, we explained our connection with product development and our objective of improving their tools. As a result, some internal users appeared to view UERs as conduits for problems and feature requests to be fed to the product team and then fixed. This assumption could create a mistrust of research efforts when the issues identified were not solved in the next release of the software.

Other interpersonal issues arose when data from these sessions were shared with product teams. Some observation sessions included very blunt criticism of the software systems by the user. This material appeared to have a deeper significance and potency for developers and managers because it came from coworkers. In some cases, stakeholders responded to harsh criticism by invoking their own user outreach projects, reporting that they had asked the same users and the issue had not come up. Interpretational conflicts like these were an unfamiliar and often difficult experience for UERs who were used to doing consumer research.

To convince product teams to accept findings from field observations, we found it helpful to conduct field visits in parallel with quantitative studies that can set a baseline for user experience and measure progress. The UER team established a regular schedule of time studies and satisfaction surveys for this purpose. Using both in-experience and retrospective measures allowed us to report on which parts of the workflow were getting better or worse (supported by the analysis done while building process models), while ongoing field research helps us to offer accounts of why this is happening. While this approach may unfortunately lead product teams to view observational findings through the lens of the metrics, this disadvantage is offset by the benefits of benchmarking the experience of a recent software release against previous versions, a comparison that could not be easily made with observational research alone.

Repeated Engagements with Users

In consumer research, working repeatedly with the same participants is studiously avoided. In our research with internal Sales and Ad Operations staff, it was both hard to avoid and potentially beneficial. Some repeat engagements happened unintentionally, as a result of small user populations being targeted for outreach by sales operations or product management as well as UER. In many cases, however, the UER team intentionally worked with participants who could offer unique perspectives due to their position, degree of experience, or familiarity with a given use case. Key informant relationships developed, in which research participants became self-aware about their roles as proxy users and actively collaborated with UERs, and UEDs.

Key informant relationships were driven by our need to learn from users who were themselves in the middle of an intensive learning process. Yahoo!'s new ad booking and delivery platform was being gradually rolled out to different sales and ad operations teams. To meet the various business requirements of those teams, the engineers were adding substantial new feature sets to the system with each release. Since the old software system had taken months for users to learn, we wanted to be able

to provide recommendations about the optimal approach to training; this meant following early adopters through their learning process. In addition, early users naturally acted as beta testers, who helped to validate and modify features over multiple iterations.

A few internal users have now worked with us for months or years, and their long-term participation has given them the status of trusted contributors, known to product managers and engineers as well as researchers and designers. Their collaboration allows us to iterate not just the product, but the product development process. Some features of these relationships are uniquely feasible because researchers and users work for the same company. Their status as fellow employees permits them a view of the development process that mere “users” are unlikely to have. Nonetheless, the experience of working with key informants offers motivation to think about all design research as having the potential to incorporate co-design. Observing users interacting with a changing software system over time, we are made aware of design research as an arrangement between people, and not a knowledge extraction operation (Suchman 2002). Recalling Granka, et al’s invocation of ethnographers as “brokers of access to ‘real’,” we have learned that our “real” is not a static body of knowledge that we curate and broker; it is the flow of knowledge and experience through our organization (Granka et al, 2008).

TRANSFORMING INTERNAL RESEARCH: FROM PRODUCT TO SERVICE DESIGN

As proclaimed in numerous mission statements and job descriptions, the normative role of the corporate user researcher is to advocate for the users of a product throughout its development; to argue for both the design decisions that benefit users and the allocation of sufficient time and resources to provide a good user experience. The Advertising Products UER team has frequently played this role with respect to internal users. The current advertising platform has had several releases, and each has included user interface improvements grounded in user research. By demonstrating the severity and business impact of certain user experience issues, UERs have been able to elevate the priority of those issues over others and get them addressed earlier than might otherwise have occurred.

The research described here, however, aspires to a two-tiered model. Rather than simply advocate for users, we seek to partner with internal users in order to better advocate for our external customers, the advertisers. We hope to do this by maintaining ongoing relationships with internal users, which helps us develop focused insights that improve through iteration, as do the products. By also working closely with UEDs, we gain the ability to not just learn from, but co-create design solutions with internal users. We can then assess these solutions against research on advertiser needs, and prioritize the measures that will ultimately have the most positive impact on customers.

Alignment between UERs, UEDs and internal users could provide the foundation for a holistic view of Yahoo!’s advertising service as a unified customer experience, rather than a series of interactions with websites, data, documents and people. In this vision, design research could be as valuable an input to employee education and training, staffing levels, or back-end system architectures as it is to user interface design. This will require design research with an expanded scope and new patterns for involving both internal users and external customers. In working toward these changes, we

inevitably involve ourselves in corporate politics, and contend with the historical association of UER and UED at Yahoo! with interface design innovation, rather than with innovation more broadly. We must also contend with imbalances in our own training and knowledge: the typical UER at Yahoo! has long experience translating research insights into recommendations for better button placement in a user interface, more clearly worded labels, or more appealing content offerings. He or she is less likely to know the language of process improvement: how to recommend changes to policy, incentives, or training.

As design researchers, how do we get from internet-based product design to internet-enabled-service design? From having a well-defined set of stakeholders who have ‘bought into’ the value of user research, to informing constituents across an organization, who may have no starting assumptions about the value of our work? It remains to be seen whether research teams like ours, embedded in large, established user experience divisions, can be nimble enough to forge new paths of influence within our companies, as described by Hanson & Sarmiento (2008). Based on our team’s experience, we would do well to continue to draw lessons from workplace ethnographers: not just from their data collection methods, but from their flexible and opportunistic approach to making organizational change.

NOTES

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Toward Industrialization of Ethnography

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This paper explores a way to expand business using ethnography as an industrial service or product. First, a challenge that companies are facing and trying to deal with, which is industrialization is described. In the software industry, as computer prices go down, the requirements for software development involve accurate estimates of the cost, the time and the resources involved in the process. Due to these new market demands, software development reached a level of maturity, which required a new approach to product development. Likewise, as ethnography grows into more intricate realms, there is a need for a more robust approach to ethnography application in business to help it achieve the right maturity level of industrialized processes. In this context of complexity, case studies from Fujitsu and examples from literature were used to test the Capability Maturity Model Integration (CMMI) framework to use to evaluate the practice of ethnography in business. As a result, a brief assessment of ethnography using the CMMI framework is shown. It describes how ethno-methodology can be used in a repeatable manner and provides results within a small margin of difference in quality. Finally, a reflection on the value of experts in this new trend in ethnography is described.

INTRODUCTION

Ethnography has grown popular in the business world. High-tech firms such as IBM, Yahoo!, and Google have hired anthropologists and developed ethnographic capabilities. Similarly, several government research labs, such as NASA and Sandia¹, have brought anthropologists in-house to work in labs or in organizationally focused roles as ethnographers and scholars (Cefkin 2009).

In the software history, thirty years ago computers were huge and expensive; software was developed by highly educated designers and programmers to make beautifully optimized programs with deep knowledge. Now computers became cheap with high speed CPUs and a large amount of memory space. Customers ask programmers to make cheaper programs with reasonable quality. Programs became huge and complicated and customers require accurate estimates of the cost, the time and the resources. So development projects have to be managed to keep their quality reasonable.

¹ The National Aeronautics and Space Administration (NASA) is an Executive Branch agency of the United States government, responsible for the nation's civilian space program and aeronautics and aerospace research. Since February 2006 NASA's self-described mission statement is to "pioneer the future in space exploration, scientific discovery and aeronautics research. Sandia is a government-owned/contractor operated facility. Sandia Corporation, a Lockheed Martin company, manages Sandia for the U.S. Department of Energy's National Nuclear Security Administration. Since 1949, Sandia National Laboratories has developed science-based technologies that support our national security.

Ethnography seems to follow the track of software development. Some years ago, customers asked ethnography as an art, but they are thinking the result of business ethnography as a product. They started to ask estimation of resources to compare between plans by research companies. Ethnography will have to be managed as same way as a software development project shortly.

Following this trend, requirements for business ethnography will keep growing. There are huge opportunities for large global companies to involve. Some customers will require really deep insight by highly educated experts, while others will be satisfied with the results by more light and abridged ethnography. In any case, ethnography efforts will have to be managed in a stricter manner to comply with business requirements.

This paper shows a trial application of the Capability Maturity Model Integration (CMMI) framework to evaluate the state of ethnography and the highlights key findings from this trial in a large software company that brought ethnography into their business context. It explores the implications of this experiment to the ethnography practice in business and discusses the implications for the future of ethnography.

OUTLINE OF CAPABILITY MATURITY MODEL INTEGRATION (CMMI)

Capability Maturity Model Integration – CMMI; is an approach for improving processes that provides organizations with the essential elements of effective processes that ultimately improve their performance (Godfrey 2008). A CMMI model may also be used as a framework for appraising the maturity of processes in the organization. The Capability Maturity Model involves five aspects: maturity levels, key process areas, goals, common features, and key practices.

The Capability Maturity Model involves the following aspects:

- *Maturity Levels*: a five-level process maturity continuum where the uppermost (5th) level is a notional ideal state where processes would be systematically managed by a combination of process optimization and continuous process improvement.
- *Key Process Areas*: a Key Process Area (KPA) identifies a cluster of related activities that, when performed collectively, achieve a set of goals considered important.
- *Goals*: the goals of a key process area summarize the states that must exist for that key process area to have been implemented in an effective and lasting way.
- *Common Features*: common features include practices that implement and institutionalize a key process area. There are five types of common features: commitment to Perform, Ability to perform, Activities performed, Measurement and Analysis, and Verifying implementation.
- *Key Practices*: The key practices describe the elements of infrastructure and practice that contribute most effectively to the implementation and institutionalization of the KPAs.

5. Optimizing	<ul style="list-style-type: none"> Processes are continuously improving. Processes are improved through quantitative feedback and shared ideas. Managers introduce innovative processes to better serve the organization's particular needs. Pilot projects are common.
4. Managed	<ul style="list-style-type: none"> Processes are predictable. Detailed, quantitative measurements of process and product quality are collected. Management can adjust and adapt the process to specific projects without losing quality or deviating from specifications
3. Defined	<ul style="list-style-type: none"> A standard software process meets the organization's specific needs Attention is paid to documentation, standardization and integration. Projects follow this defined process, even under schedule pressures. Management recognizes that these processes are the quickest route to completion.
2. Repeatable	<ul style="list-style-type: none"> Processes are defined and documented. Basic project management techniques track cost, schedules and functionality. Successes can be repeated. Specific implementations differ from project to project.
1. Initial	<ul style="list-style-type: none"> Processes are ad hoc, chaotic and disorganized. There are few formal rules of procedures. Success depends on individual effort.

FIGURE 1 CMMI maturity levels

In this paper, we will focus on the maturity levels to assess some cases from our experience and from literature to evaluate ethnography's maturity through process optimization and continuous process improvement. There are five maturity levels defined along the continuum of the CMMI:

- Level 1 – *Initial (Chaotic)*: A characteristic of processes at this level is that they are (typically) undocumented and in a state of dynamic change, tending to be driven in an ad hoc, uncontrolled and reactive manner by users or events. This provides a chaotic or unstable environment for the processes.
- Level 2 – *Repeatable*: A characteristic of processes at this level is that some processes are repeatable, possibly with consistent results. Process discipline is unlikely to be rigorous, but where it exists it may help to ensure that existing processes are maintained during times of stress.
- Level 3 – *Defined*: A characteristic of processes at this level is that there are sets of defined and documented standard processes established and subject to some degree of improvement over time. These standard processes are in place (i.e., they are the as-is processes) and used to establish consistency of process performance across the organization.
- Level 4 – *Managed*: A characteristic of processes at this level is that, using process metrics, management can effectively control the as-is process (e.g., for software development). In particular, management can identify ways to adjust and adapt the process to particular projects without any measurable loss of quality or deviations from specifications. Process capability is established from this level.

- Level 5 – *Optimized*: A characteristic of processes at this level is that the focus is on continually improving process performance through both incremental and innovative technological changes and improvements.

At maturity level 5, processes are concerned with addressing statistical *common causes* of process variation and changing the process (for example, to shift the mean of the process performance) to improve process performance. This would be done at the same time as maintaining the likelihood of achieving the established quantitative process-improvement objectives.

ASSESSMENTS FROM PESPECTIVES OF MATURITY

In this section, assessments of ethnographic research using the maturity levels approach are shown. The following evaluations depict our point of view how to make customers satisfy in ethno-methodology business through actual case studies.

Level1 (Initial): Traditional ethnographic research

Traditional ethnographies are assessed as being level 1, which is “Initial”. Sato has commented, “As it has been pointed out for a long time, it is almost impossible to create a ‘cookbook’ type of manual for fieldwork, which is because nothing is as far from the intrinsic nature of on-site investigation than strict application of some formulae or rules” (Sato 2002). The essence of ethnography is in the depiction of culture and there may be a great variety of target sites. For that reason, traditional ethnography combines different investigation methods best suited to the situations at the sites. For example, Lancaster University, which has made use of ethnography to design systems for air traffic, says that there is no well-established investigation method:

“There is no one method of ethnographic analysis. The approach we have adopted involves various practices, alerting concepts, and semi-technical terms, which we can indicate but have no space to defend in detail. The fieldworkers immersed themselves in the work by spending several months observing activities on and around the sites, talking to staff, and talking with them so that they could develop an understanding of what the controllers do.” (Hughes, 1992)

Level 2 (Repeatable): Repeatable ethnography

Spradley et al. (1979) has structured the process of ethnographic interviews and defined elements that are important in interviewing. Beyer et al. (Beyer 1997) has defined a method of gaining an understanding of the user’s context for system design and has defined procedures for understanding the context such as the artifact model and sequence model.

These techniques are intended for navigating the process of ethnography and can be seen as indicators of the procedure of ethnography that has been conducted at a personal level.

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Case examples have been reported in which ethnography was used to determine specifications in the fields of system development and product development. For example, Bentley et al. (Bentley 1992) have reported on case examples where ethnography has been used in the design of air traffic control systems, in which they say that it is difficult to put successful cases to wider applications:

"We have had the advantage that the people involved from both sociology, and software engineering were willing to be flexible and willing to recognize that the other discipline's viewpoint may be valid, irrespective of how alien it might be. In this respect, we believe our collaboration has been successful but there have been difficulties which we believe are likely to arise in other collaborative projects of this nature."

This shows that success can only be achieved under certain conditions, which leads to the conclusion that the standard process of ethnography has not been defined.

Level 3 (Defined): A case study

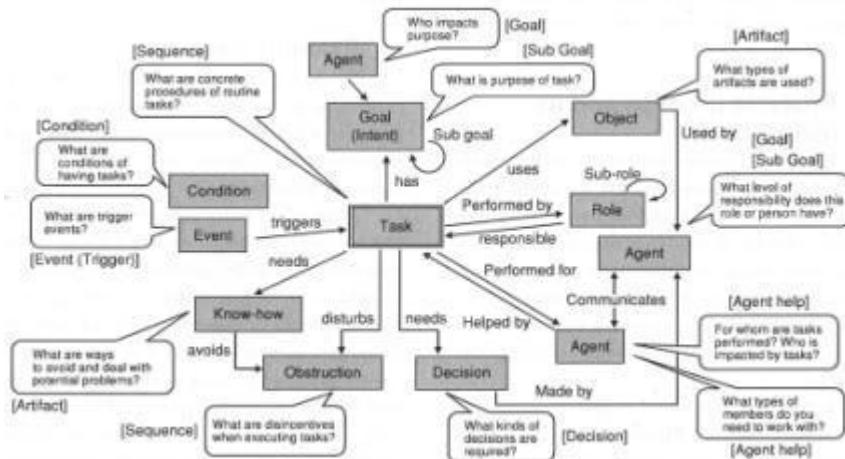
In this section, activities in Fujitsu are described, and it is assessed whether Fujitsu satisfies level 3 or not.

Fujitsu is a Japanese based system integration company and that has made use of fieldwork not as a tool for research but as a tool for qualitatively analyzing customers' work practices and problems that supplement quantitative customer analysis in the conventional marketing and product design. Ikeya et al. (Ikeya 2007), an anthropologist who conducted fieldwork training for Fujitsu, has commented: *"As they accumulate their experiences, they customize fieldwork into a more systematic method in order to cope with constraints they have on the overall schedule. They have developed a quite effective way of doing team ethnography."*

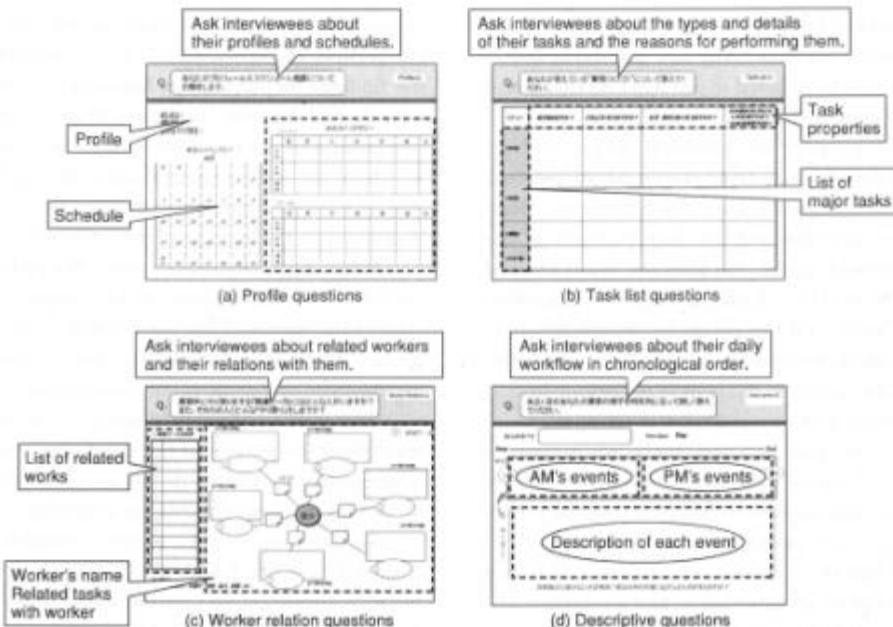
In the activity called "engineering of ethnography," Kishimoto et al. (Kishimoto 2009) standardized operation procedures and outputs to implement them at more than 50 customer sites and gave training to more than 400 employees for the purpose of conducting fieldwork in a few weeks, which is generally executed over a few months to a few years in the academic world, to business.

Kishimoto and his teams collected a series of field notes and findings made by a trained team and they counted the volume of the notes and the number of findings day by day. Based on this empirical study, the number of days for shadowing has been established. The team also developed a technique and guidelines for standardizing the quality of activities of ethnography in addition to the quantitative aspect.

It is defined that several viewpoints such as time sequence, space and human relations are necessary to obtain a large amount of qualitative information in a short time - as shown in Figure 2.

**FIGURE 2. A meta-model of work context**

To assist with exhaustively covering these viewpoints for interviewing, several types of worksheets are provided (Ishigaki 2009). Quantitative issues have been standardized by designing in advance which worksheet to use at a given time or situation, which also allows for the definition of the types of worksheets to use and the extent of information obtained by interviewing, like shown in Figure 3.

**FIGURE 3 – Worksheet examples**

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In the study's events, a trained team was charged with the negotiations for a system renewal and the front-end of requirements definition for a branch office at a financial institution. They conducted interviews and a one-day observation at a financial institution to analyze the workers' invisible human awareness of issues and their intrinsic motivation. The findings were shared in a session with executives, general managers of each branch office, and with directors and chiefs of the department of clerical work. The results were praised higher than the team's original expectations and they succeeded in the system development negotiation without lapsing into price competition.

It has been pointed out that fieldwork by engineers without fieldwork experience tends to result in analysis from an etic² point of view such as pointed out by Obata et al.(Obata 2007): “*They evaluated work practices based on their own observations and perspectives rather than describing problems from the workers' point of view. We reminded them repeatedly about the guidelines and procedures for an ethnographic approach*”. So, guidelines to help lead to emic³ results, as depicted in Figure 4, were developed



FIGURE 4 – A process in the guideline (Obata 2007)

Aim is proposed by Yagi et al. (2009) to help researchers gain an understanding right down to the inner deep level of customers. Aim is composed of a phase of asking customers about past positive experiences and a phase of discussing, based on the result of the previous phase, the source of energy for action and values of the customers. “*The most distinct features of this model are the ability to extract “future vision and direction and past positive experiences,” The focus is on positive feelings—values, features, source of motivation that envelop the everyday duties of workplace users and the products and services that they use.*” (Yagi 2009)

² An "etic" account is a description of a behavior or belief by an observer, in terms that can be applied to other cultures; that is, an etic account is 'culturally neutral'. From Wikipedia visited on July 23, 2010.

³ An "emic" account is a description of behavior or a belief in terms meaningful (consciously or unconsciously) to the actor; that is, an emic account comes from a person within the culture. Almost anything from within a culture can provide an emic account. From Wikipedia visited on July 23, 2010.

3. Defined	<ul style="list-style-type: none"> ✓ A standard process meets the organization's specific needs ✓ Attention is paid to documentation, standardization and integration. ✗ Projects follow this defined process, even under schedule pressures. ✗ Management recognizes that these processes are the quickest route to completion.
2. Repeatable	<ul style="list-style-type: none"> ✓ Processes are defined and documented. ✓ Basic project management techniques track cost, schedules and functionality. ✓ Successes can be repeated. ✓ Specific implementations differ from project to project.

FIGURE 5 – Assessment of the case

Figure 5 is a summary of an assessment of the case. As the figure shows, Fujitsu's standard processes are in place and they are trying to establish consistency of process performance across the organization. Through this assessment case study, Fujitsu can be assessed as level 2 which is "Repeatable" and they are on the way to level 3 which is "Defined." To be assessed as level 3, Fujitsu needs to establish consistency of process performance across the organization and needs some degree of improvement over time. Measurement is required as level 4. Although Fujitsu's method contains steps or concepts for improving the quality , apparently it does not extend to the assessment of quality.

IMPLICATIONS FOR FUTURE ETHNOGRAPHY

Toward Level 4: Measured

A number of researchers have pointed out qualitative issues with fieldwork executed by engineers. Obata et al. (Obata 2007) mention, in addition to the tendency toward being etic, that the description of episodes tends to be insufficient and the observation on the relation between an episode and recognition often contains a jump: "*However, the descriptions of episodes were sometimes insufficient. Members of the inspection team who were outside the project teams had difficulty understanding what was going on in the projects. Professional ethnographers sometimes pointed out that the relationship of the episodes to the discussions was unclear.*"

Jordan et al. (2008) point out that fieldwork conducted by engineers lacks a theoretical framework and does not go beyond stopgap solutions: "*They were missing the kind of theoretical framework that would allow them to go beyond proposing "band-aid" solutions and instead consider the implications of their local observations for the company as a whole.*"

This indicates that there is more than one viewpoint in assessing quality, to say the least. One is validity, or whether the validity of the analysis is sufficient as a baseline. Assessment of whether or not a proposition objectively deduced from facts is clearly distinguished from the assertion of an observer is required. The second is ethnocentric findings. The core of ethnography is to obtain the viewpoint of residents, and how much has been found from an emic point of view can be a measure of assessment. The third is business effectiveness. There is apparently a discussion of whether or not the results of analysis are able to support the deduction of essential improvement plans in business.

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Rejon et al. (2009) propose a framework of metrics and index for ethnography, which are believed to provide measures of business effectiveness. “*Although there is no proven formula for ethnographic value recognition, based on our projects, we have defined a method called SEED (Savings, Efficiency, Envisioning and Differentiation) that identifies several key factors for tracing how ethnography affects business and what contributions to business it makes.*”

Toward Industrialized Ethnography

Fujitsu’s case is considered a successful endeavor where a large company successfully brought ethnography into the business context. They are successfully continuing to manage ethnography research teams like software development projects. These teams are required to make their output measurable by the request from their internal customers; however they are yet to have good indicators.

If organizations using ethno-methodology are assessed as higher than level 2 with CMMI maturity level, their customers will be able to expect consistent process with consistent results. The customers will be able to see how much the research has proceeded, what the current middle output is, how good the output is when comparing with their initial expectations to judge to if the project should continue or not, for example. The detailed process will be modified to adjust for the field where researchers study and there will be no same result. In software industries the situation is the same and there are no identical projects and no identical software. However CMMI is working effectively in software industries because it fits requirements of customers.

Software development is industrialized with CMMI and other lots of efforts. In the software development industry, only some special software such as encrypt systems or the core part of operating systems is developed by highly educated programmers. Most of the software is developed by programmers who have received a few months of training. In the architecture world, some customers ask for famous professionals to design their house, but most of the people are satisfied with houses designed by anonymous designers.

CONCLUDING REMARKS

In this article, we explored a new wave in the world of ethnography, which is the expectation to industrialized ethnography or engineered ethnography. Such ethnography requires stability, repeatability and measurability. Though some researchers call them “dirty” – with no depth and patched; many customers will ask for such ethnography from now. It is time for each ethnographer to choose to be an expert or to be a manager of industrial ethnographic research teams.

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Ethnography, Storytelling, and the Cartography of Knowledge in a Global Organization: How a Minor Change in Research Design Influenced the Way Our Team Sees, and is Seen by Our Organization.

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Our team unites qualitative researchers, designers, and prototyping engineers to investigate workplace technologies using a four-step process: ethnography, analysis, intervention, measurement. Projects develop in relation to the needs of internal corporate units identified as project stakeholders. An experiment with a more ethnography-centered research approach, conducted without a specific internal sponsor, led us to develop findings we believed could benefit many groups in our organization—designers, product teams, salespeople, corporate strategists—but presented us with some unfamiliar challenges. First, we needed new storytelling and social media tools to disseminate our message. Second, we needed a way to find out who, in our organization of 75,000 globally distributed employees, might value our findings. In response, we initiated an internal project investigating and mapping out social networks of knowledge exchange and strategic influence in our company. We foresee using this strategy map to guide future efforts to share our findings to a more diverse audience in our company.

Ethnographers in corporations contribute a unique way of knowing about the world to their organizations. An ethnographic way of knowing requires listening to people as they share stories of their personal experiences, their feelings, and the deeply personal meanings they perceive and create in all aspects of their lives. In our work, as members of a team researching technology opportunities, we typically focus on identifying customer needs in workplace environments. Based on these findings, we create working prototypes, introduce those prototypes into our research subjects' work environments, and measure how valuable those prototypes are for our subjects. Projects following this research design, which our team has refined over more than 25 project cycles, typically require six months to complete.

In 2009, for largely incidental reasons, we attempted an exploratory project that involved abandoning the prototyping and measuring stages and embracing a more lightweight, ethnography-centered approach. As a consequence, we ended up having what were, for us, some novel experiences that resulted in nothing less than a rethinking of our position in our global organization, and of our relationship with strategy in that organization.

This paper begins by describing that project and the model that emerged from it. Next, we discuss how our need to share our findings in our organization led us to expand the set of tools we use to share stories about the work we do. Finally, we describe how, as a result of these experiences, we launched a project to map out the different ways of knowing in our organization, and how those ways of knowing contribute to internal conversations about our organization's corporate strategy.

A NEW ROLE FOR ETHNOGRAPHY IN OUR RESEARCH DESIGN

In the fall of 2009, we undertook what we expected would be a two-month project investigating how people use cloud-based services¹ in their work and personal lives. In the first two weeks we developed a simple interview instrument, recruited informally among our friends and colleagues, identified 15 individuals as research subjects, and visited subjects at their work or home offices, interviewing them and taking pictures as they showed us their work spaces and web services. By the end of those two weeks we had completed the thirteen one-hour interviews that would provide the data for our analysis.

In total, eight men and five women shared with us stories of how they used digital services. Manuel, a sixteen-year-old high school rap artist, described the web services he used to create, share and promote his music, and told us he used email as a channel for receiving updates about activity on social networking sites like Facebook and MySpaceMusic, but not for communicating with friends. James, a 65-year-old Fortune 500 vice president, explained how he had moved his business and personal data entirely to the cloud, despite corporate IT policies restricting him from doing so. Although our recruiting was informal and fairly casual, we did seek, and were able to interview, individuals with diverse personal profiles, people who were entrepreneurs, small business workers and enterprise workers, who ranged from tech-savvy to tech-wary, and people of different ages between 16 and 65.

After typing up our interview notes, we spent four weeks rereading and analyzing the stories our informants had shared. As we examined the data we collected, we realized we could use their stories to map out the phases people go through in their relationships with digital services. By the end of the sixth week of research, we had developed what we referred to as a Service Relationship Model. Below we will say more about the steps in the analysis that led us to this model, but first we would like provide some background on how this project was in so many ways a new experience for us.

A Four-Step Research Design and a Six-Month Commitment

Ricoh Innovations is a small, 10-to-20-person research organization in California's Silicon Valley with seven years of experience conducting original user research to support our corporate sponsor, a multinational company that manufactures and sells a range of office equipment and media devices.

Since our foundation we have developed a standard methodological approach, revised through more than 25 project cycles, in which teams of ethnographers, designers and engineers identify important values for users through a six-month-long, four-step process. First, we conduct ethnographic research on subjects at a work site, using methods such as contextual observation, shadowing, and structured interviewing. On this basis we identify unmet needs or other opportunities

¹ The National Institute of Standards and Technology (Peter Mell and Tim Grance, Version 15, 10-7-09) defines cloud computing as “a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.” <http://csrc.nist.gov/groups/SNS/cloud-computing>

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to improve their work experiences. Second, we work together with our research subjects to prioritize the needs or opportunity areas we have identified, selecting the issue of greatest interest to both parties. Third, we build a functional prototype that seeks to create a valuable experience for workers in relation to that issue. Fourth, we deploy that prototype for subjects to use in their everyday work—typically this is an overlay on their existing tools, which they can adopt, experiment with, or ignore as they choose—and we measure the value of the solution we provided using ethnographic and quantitative methods.

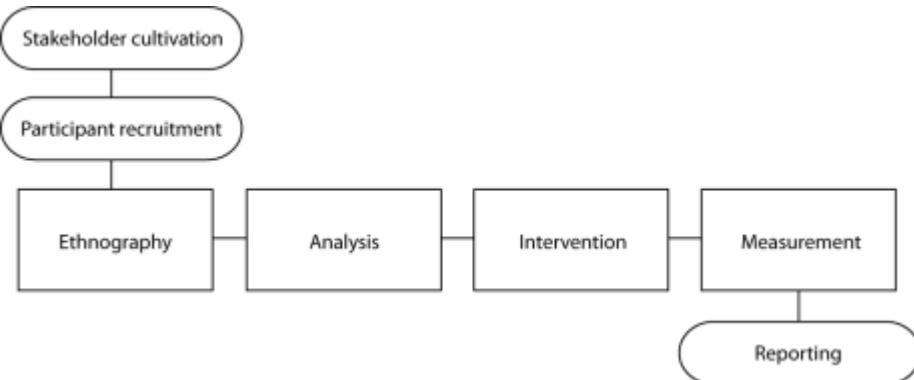


FIGURE 1. Our traditional six-month research process.

The above account usefully describes our research design, but in practice it also erases several important areas of work that contribute to making our research successful. First, we regularly spend time cultivating relationships with various units in our company to learn what issues they care about. Before a six-month project begins, we typically designate one internal unit as the audience or stakeholder for that project. Knowing in advance who our audience will be influences our choice of site, our prototype approach, and the metrics we use to test value. Second, having determined our project stakeholder, we identify and recruit research sites; it can be no small challenge to convince an organization to grant us six months of access in exchange for our insights into their work situation. Finally, when our research is completed, we create presentations and reports to communicate our findings with the division or unit identified as our project stakeholder.

With this as our standard research model, how and why did we find ourselves conducting a two-month project with no research site, no prototyping agenda, and most importantly, no internal audience? The answer is, we had anticipated that future six-month projects would likely be shifting in the direction of digital services, and we decided to use the two-month window available to us to attempt some lightweight exploratory research to provide grounding for that new area of inquiry. Little did we know at the time that this decision would launch a cascade of unintended consequences for how our team works, and how we understood our position in our company.

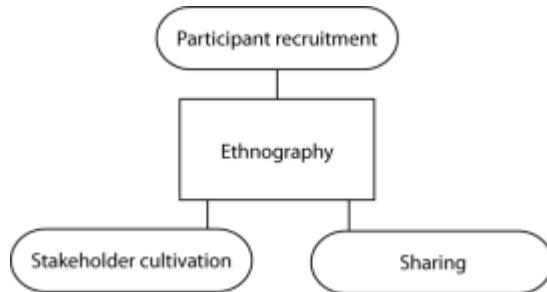


FIGURE 2. *Our recent two-month research process.*

EXPERIMENTING WITH NEW TOOLS FOR STORYTELLING

Working through the words and images collected in our contextual interviews, we had arrived at a model for how people form relationships with digital services. What we didn't have was a specific unit inside our company to which we could present our findings. We believed we had an important story to share, one that could potentially benefit many groups in our company, but we were not sure where to start disseminating our message in an organization with 75,000 globally-distributed employees.

In response to this challenge, we adopted what were for us, new forms of storytelling, new digital technologies, and new social media tools. We are not saying that the methods we used are fundamentally novel, or are new to our industry. We mean only to emphasize that we were experimenting, trying things that were new to us, and that the conditions pushing us to do so arose unexpectedly as a result of our new research approach.

The Book as a Familiar Medium for Sharing Stories

To help people outside our team understand the steps we used to develop our findings, we created a hardcover book, a 'methods sampler', that we had printed by a web-based on-demand publisher. The book presented images of fourteen artifacts from the project, and described how each artifact represented a distinct step in the process of creating the model. Because we chose to focus on documenting each and every step we took in generating our findings, it prompted a lot of interest from leaders in our organization who, in the past, had focused their interest more on our findings, rather than on the ethnographic ways of knowing that produced those findings. We also found that letting people hold a small hardcover book, flipping through pages, offered them a comfortable way to interact with the story we were telling, without the need to coordinate a shared interaction such as a traditional slide presentation. As a result of this positive response, we have since printed numerous copies to share with key executives and with other teams in our organization.

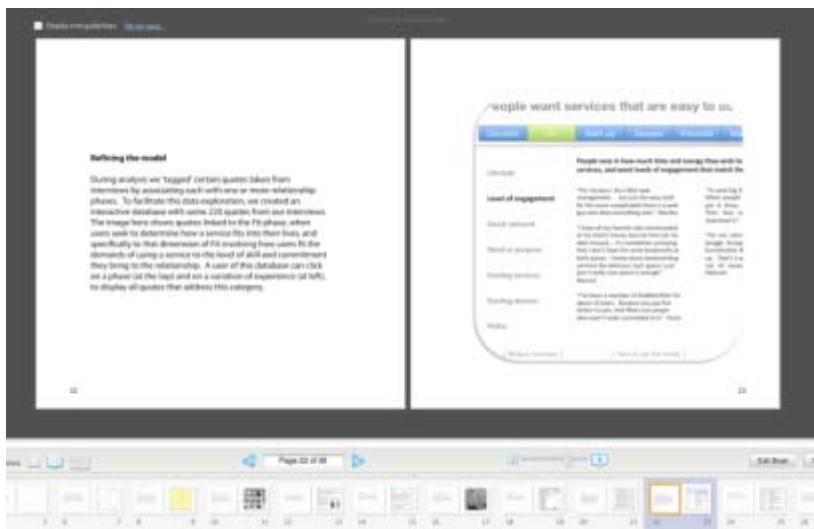


FIGURE 3. Web-based on-demand publishing means researchers can create hardcover books documenting project activities in a format project sponsors and others can review quickly and conveniently. High-quality copies produced at low cost, like the one being laid out here, can make meaningful memory objects for project stakeholders.

Using Videos to Achieve Feral Distribution

Toward the end of our two-month project we created a slide presentation about our findings. Such presentations are perhaps the dominant way that information is shared in our organization, and presentations to small groups are traditionally how we deliver our findings to stakeholders in our work. After completing that presentation, we quickly realized that a slide deck as a stand-alone document was an inadequate response to our situation.

For this project, we needed a medium that would allow our findings to be disseminated more broadly; we also wanted to share our story in a form so compelling that people would want to pass it on to others. Until recently we might have said we hoped our findings would “go viral” within our corporation, but after seeing Genevieve Bell speak recently about “feral technologies,”² a more appropriate description would be to say that we wanted them to “go feral,” meaning that we hoped our findings might escape into new ecosystems of meaning and practice, to find new niches to exploit. To us the term “feral” helps us move beyond the idea that we can control and plan for how our findings might find new life and create new value in our organization, and helps us recognize that it is the unexpected ways they might find new places to live that were most interesting to us.

² “Feral Technologies: An Ethnographic Account of the Future.” An Ethnography in Industry presentation, PARC Forum, 3 June 2010.

The idea that we were making a video pushed us to rethink almost every aspect of our original presentation design. We set out to create a new presentation that would tell our story in a cleaner way, using a more simple visual language, with the expectation that we would use it as the basis for a video. We ended up making three separate videos, one to present our model of the service relationship, one to focus on how users experience the service relationship, and one to focus on how our organization can take advantage of our findings to design products and services in ways that give users better relationship experiences. To create interest in this video series, we also chose to make a trailer, which we released in advance, and promoted through internal corporate blogs, to stimulate anticipation of our findings.



FIGURE 4. Inexpensive screencasting software can allow researchers to quickly and easily create videos from slide presentations. In the project shown here, soundtrack recording and editing, the design of the screencast from slide image files, and the inclusion of subtitles, can all be handled within the software. Video can be a useful way for researchers to spread stories about research findings beyond their traditional internal audiences.

On our first attempts at making the videos, we simply clicked through our new slide presentation using screen cast recording and editing software, while recording a voiceover directly into our laptop using a USB microphone. After many failed attempts, we recognized that live recording was not allowing us to achieve the quality level we desired. We prepared written scripts for all four videos, and recorded audio takes until we were satisfied with the results. Finally, after minor soundtrack editing, we imported the slides into the screen cast software, and timed the slide transitions to match our narration.

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To address the fact that our audience was composed mainly of native Japanese speakers we also tried different methods for helping our story cross that language barrier. We experimented with both Japanese subtitles and Japanese-language narration, and settled on subtitles; a local freelancer translated our English-language script into Japanese, and our editing software made it straightforward to place subtitles appropriately.

With our video series completed, we were able to begin to release our findings through internal corporate blogs, directing viewers to a site where all project materials could be viewed, downloaded, and shared. Materials available at that site included all videos in subtitled and not-subtitled formats, scripts in both English and Japanese, and the slide presentations used to create the videos, in various formats. It was an incredible challenge, at the time, to find approaches to distribution that leveraged the power of social media and social networking, but that allowed us to retain control over the dissemination of materials that were, at that time, confidential internal findings. These frustrations were, for us, the final experiences that led our team to make concrete shifts toward integrating cloud-based collaboration platforms into our communication and productivity toolkit.

Moving from presentation-based sharing to participation-based sharing

As we developed our Service Relationship videos, we realized our vision for sharing findings was moving away from a presentation-based model to a participatory model; essentially we were tired of showing presentations in dark rooms to passive audiences, and envisioned ourselves creating opportunities for teams in our global organization to explore our model and apply it to their immediate work situations through more playful and engaging activities. We came to see our video series as a tool for driving viewers to participate in future activities like games or workshops where participants could actively explore and experience new ideas rather than simply passively watch them.

As a first small step in that direction, we created a Relationship Design Guide, which teams in our organization could use in a workshop context to explore how insights from the Service Relationship model might intersect with specific projects those teams were working on. More broadly, we have also taken significant steps to increase opportunities for audiences to have participation-based learning experiences. For our team, trying a two-month project and following an uncharted path through new situations and new experiences, came to be seen, in retrospect, as an experience that shifted our own internal team culture in the direction of increasing activities that promote participatory and play-based learning.³

³ Jane McGonigal's research generally, which we first encountered through her whitepaper "Engagement Economy: The Future Of Massively Scaled Collaboration And Participation" (Institute for the Future, 2008), was influential in orienting our interests toward the relationship between gameplay, engagement and innovation. Ken Anderson and Jane McGonigal's "Place Storming: Performing New Technologies in Context" (NordCHI 04) exemplifies the value of participation-based approaches for technology innovation.

MAPPING WAYS OF KNOWING IN OUR ORGANIZATION

The circumstance of having research results we cared about, but no designated internal stakeholder with whom to share them, had an additional unintended consequence. It highlighted for us a previously unrecognized opportunity to cultivate a broader audience for our activities in our organization, and launched us on a path to redefine our place in our organization. We cared strongly about sharing our findings because we believed our ethnographic way of knowing had uncovered *strategic* insights: Giving people strong use experiences and strong relationship experiences should be, we felt, a cornerstone of our company's strategy. So who else in our organization, we wondered, was interested in users? Who was focused on strategy? What other ways of knowing shaped Ricoh's strategic vision, and how would our ideas fit with, support, or conflict with ideas generated by those ways of knowing?

Such questions caused us to turn the lens of ethnographic reflexivity, which researchers often apply to themselves as individuals, onto our extended corporate self, asking essentially, Who is our corporation, what does it believe, and what factors influence the perspective it adopts toward the world? In response, we began an internal project to investigate and map out the networks of knowledge production and exchange that contribute most directly to the formation of corporate strategy in our company, a map we foresee using to guide our future efforts to recruit and market our findings throughout the company.

Our first step was to look for evidence on the Internet and in internal publications. We looked for groups that appeared to deal in strategy, and for individuals who had published internally or externally on design or ethnography. Using search and social networking sites we found people with roles, or in groups, that included the word "strategy," although their publications and technical reports did not always show evidence of strategic thinking as we would recognize it.⁴

Probing further through personal contacts, we discovered that many groups have names that mask or simply don't correspond closely to their function. The primary responsibility of a particular 'corporate strategy' group might be maintaining a release schedule for upcoming copiers. Organizational charts in Japanese companies, we soon learned, were often *intentionally* opaque, to veil a team's true purpose and provide protection against potential corporate espionage. So, we began to build our own information-rich organizational chart, with personal names, contextual information, and histories attached to the impersonal structures presented in corporate annual reports. In sum, these methods gave us useful insight into our corporate self, but left us unsatisfied.

The conundrum we still faced was that the most important questions, such as "Who in our organization is working on strategic problems?" or "Who does the CEO actually listen to?" couldn't be

⁴ We find useful Collis and Montgomery's description of corporate strategy as a competitive vision for gaining corporate advantage that "actively directs executives' decisions about the resources the corporation will develop, the businesses the corporation will compete in, and the organization that will make it all come to life." David J. Collis and Cynthia A. Montgomery, "Creating Corporate Advantage." *Harvard Business Review* Vol. 76, No. 3. (1998), pp. 71-83.

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answered by looking in from the outside, nor could they be posed directly or openly inside our corporation. We realized quickly that it would be more productive to work informally through our team's contacts who knew company executives' histories through decades of experience. Identifying individuals in our organization who contributed to conversations about strategy, and gaining a sense of how their personal histories might predispose them to relate to our work, became our new goal.

In choosing the technology platform for this project, we opted for a low-tech, lightweight prototyping approach for our first iteration. Trading cards, like those widely collected among children and baseball fans in the U.S. and Japan, seemed like an appropriate form factor to start with for a number of reasons. They are small, tactile, visual, and inspire a sense of fun and playfulness. Like sticky notes, they can be spatially arrayed and recombined to facilitate interactions during group activities.⁵ We also chose to make discrete physical artifacts, rather than, for instance, using digital tools, like social graphing software, interactive visualizations, or databases, in part to keep this potentially political project under wraps more effectively, and avoid the unpleasant possibility that this work-in-progress might, via the internet and other forms of digital transmission, inadvertently go feral on us.

To provide the materials needed to grow our card collection, we have recruited colleagues to help us take photographs of, and write short bios about, key people they meet during trips to Japan. In the next iteration of these cards, we intend to augment these materials by eliciting from our 'players' personal narratives of their values, beliefs, hopes and fears regarding our company's future. Where this process will lead us isn't clear, but it is clear that this new engagement with our role in our organization, and the strategic value of ethnographic ways of knowing in our organization, came about as the unexpected consequences of our decision to do a small side project, a decision that at the time, we saw as a minor blip in our way of doing things.

ARE YOU IN A GROOVE, OR IN A RUT?

Generalizing from our experience, we propose that research teams accustomed to iterating and incrementally adjusting their research methodologies may in fact, over time, approach local equilibrium states in relation to their internal customers and their social and political relations in their organizations. More radical shifts in their approach to methodology can have the advantage of disturbing those conditions, pushing teams in new directions regarding their situation within social networks of knowledge exchange and strategic influence in their companies.

Broader reasons have prompted us to share this story, as well. As corporate ethnography practitioners, we believe that reflexive examination of the holistic world of our practice is an important component of that practice. Our worlds are complex wholes comprising a range of elements, including various practical and theoretical ways of knowing, methodologies for executing research, and

⁵ Uses of cards in activities include: identifying people and groups we might share specific findings with, or recruit as stakeholders for future projects; combining cards with ethnographic data to provide constraint and inspiration to facilitate ideation and concept development; identifying which kinds of strategic thinking are well represented in, or missing from, our organization's decision making.

relations of power and status within organizations that play out through competition between ways of knowing as much as they do through competition between individuals and groups. Promoting an ethnographic way of knowing, for us, means working to make transparent the relationships that hold between our research methods, our findings, and the stories we tell, so that our contributions are seen as coming from a way of knowing open and accessible to all, and not as the results of a privileged, objectivist or exotic practice. In this way, the rewards of an ethnographic way of knowing can contribute to a broader dialogue within our organizations about the ways of knowing that guide corporate strategies and corporate actions. For us, this reflexivity has also transformed our sense of place in the world; where we once saw our role as helping our company identify new business opportunities, we now see our role as changing how our company thinks about people.⁶

NOTES

The authors wish to thank Izabel Barros for her comments on a draft of this paper. This paper represents the authors' views only, and does not in any way represent the views of any other individuals, or the official views of Ricoh Innovations Inc. or the Ricoh Family Group.

⁶ Simon Roberts has made the point, in a way that has influenced our thinking on this matter, that “embedded ethnographers” working inside corporations have a unique opportunity to seed ideas. See his “Embedded Anthropology: My Talk from the RSA Design Society Event.”
http://ideasbazaar.typepad.com/the_ideas_bazaar/2010/05/embedded-anthropology-my-talk-from-the-rsa-design-society-event.html#more accessed July 13, 2010.

Practice at the Crossroads: When practice meets theory, a rumination

MELISSA CEFKIN

IBM Research

Consumer practices, work practices, not to mention management, design and research practices. The notion of “practice” remains core to much of what ethnographers in industry examine, expose and aim to inform. This paper questions: while we study practice(s), while we may frame our research and analysis with sensitivity towards rendering visible the richness or particularity of peoples’ practice, what have we really learned about practice? In part aimed at considering whether and how the work performed by ethnographers in industry advances or critiques theories of practice as explored by Bourdieu and others, the paper aims to reconcile the fact that we are “there” at the behest of our business counterparts to have an impact and affect change. So the question shifts from not only how we use and understand concepts of practice to how it frames the expectations of our business partners and stakeholders. What I have found is that there is both productive overlap and significant slippage between our (theoretically buttressed and anthropologically-resonant) notions of practice and the (action-oriented, practical ones) of our business counterparts. This piece is intended as a reflective rumination on the notion of “practice” at the cusp of theory and business to appraise its value, present and future, to both theoretical and business interests.

INTRODUCTION

This paper started from a simple impulse, to explore what has come, after several decades of ethnographic work in and for businesses and organizations, of the concept of “practice”. My initial sense was that we have made good use of the concept as theoretically explored by Pierre Bourdieu and others, or at least many parts of it. Indeed, whether intentionally or not, the notion of practice forms the basis of much of our work, shaping our research designs and informing many of our insights. We explore and expose the unfolding of consumer experiences as people identify, select, acquire and use goods. We discover and interpret the routines and actions of workers engaged in technology-mediated tasks, reveling at their creative work-arounds to get the job done. We analyze these practices to create experience models and evaluation frameworks, rendering useful representations with a flare! But the question remains, what have we learned *about* practice in the process? And what, if anything, does it offer back to the traditions of scholars following and debating the likes of Bourdieu, who take “practice” as a framing concept for understanding human action vis-à-vis social order? This work began from a desire to explore if and how the work performed by ethnographers in industry has done anything to refine, critique or advance theories of practice.

Such an exploration demands accounting for the contexts in which we¹ work – a view Rick Robinson exhorted us to in the inaugural EPIC conference in 2005 (Robinson 2005). That is, to

¹ As my colleagues before me (Bezaitis 2009, Blomberg 2005), I reference this “we” with a knowing sense of the broad and hybrid worlds from which practitioners who assemble in and around the occasion and residues of an EPIC conference come, and the traditions and disciplines they embody and perform. I use it broadly here to

recognize that as practitioners (albeit, practitioners skilled in ethnographic methods and approaches and formed, at least in many cases, through traditions of critical, social and cultural theory), there is something rather specific expected of us. We are “there” at behest of clients, internal and external, to have an impact, to provide results, and to offer insight in order to affect change. “This process of matching the model we make of the situation with theirs [clients’]” Robinson suggests, “of engaging them in conversation so that what emerges from the process Beer calls “rigorous formulation” is useful as well as accurate is, I think, one of the defining characteristics of this domain with which theory (here) must engage.” (2005: 5) So the question shifted to include not only how “we” use and understand practice and what it means to us, but to explore what it means to our business counterparts, stakeholders and partners. How does it frame their expectations of what we offer? In other words, in order to appraise the value of the concept of practice to ethnographic praxis in industry and with that, to reassess our contributions (perhaps latent) to theory, I needed to turn my attention to the cusp of theory and business practice. This paper aims to summarize the conclusions I’ve come to thus far.

A CONUNDRUM OF PRACTICE, OR A PRACTICE CONUNDRUM

So what did I find? In brief, there is indeed often considerable overlap between our theoretically buttressed and anthropologically-resonant notion of practice and the action-oriented, practical ones of our business counterparts. At some level, both are concerned with how things are actually done, with the realities beyond the formal and official accounting of steps and actions. The recognition that there is a “more” that exceeds the boxes and borders of rationalized business constructs is humbling and is often embraced with a hopeful spirit of humanity.

At times, however, there appears to be at times significant misrecognition, a slippage of meaning that can create a disconnect between what the ethnographic practitioner produces and what our business partners think they will get. One of the core features of a theoretical orientation to practice is that actions and meanings are constructed by actors in relation to specific social orders (Ortner 1984), that they are constructed relationally (Osterlund and Carlile 2005). “All of these routines and scenarios are predicated upon, and embody within themselves, the fundamental notions of temporal, spatial, and social ordering that underlie and organize the system as a whole” (Ortner 1984: 154). Consistent with a practice-based perspective, our work often leads us thus to conclude that the realities that matter on the ground (and thus to the products, services and organizational efforts we and our business partners aim to effect) need to be understood as situated, dynamic, and often negotiated and even contested. “Practice theory goes a step further than other theories focusing on interactions or relations. It looks not only at the recursive dynamics of a given relation but places everyday practices as the locus for the production and reproduction of relations” (Osterlund and Carlile 2005: 92). This “recursive dynamics” leads us to conclude that things vary. They require flexibility. What is important in understanding experience, ethnographers in industry often exhort, is the journey not the map. Our “implications for design”, to the extent that we become prescriptive at all, lean towards recommendations of ways to build for flexibility and adaptability. We become, consequently, particularists, because it is in the

reference those using anthropological and ethnographic approaches to rendering interpretations of people’s actions with the target of making their results useful to corporations and organizations.

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specific ways of building for flexibility and adaptability that design (of products, of strategies, of policy, of organizations) matters.

There are two ways in which I worry for the significance of this state of affairs. One is simply a concern for the obvious – do we not already know this by now? Do we need more research to get to the same answers pointing to flexibility, adaptability, and situatedness? What is at stake here is the value of our work in business settings, and the possibility of our coming up short in having original and compelling insights and in turn, pointing to meaningful and non-trivial pathways to change.

The opposite state of affairs is also present and is equally problematic. This is that we so highlight the systems of “production and reproduction of relations”, the “social ordering” that we shift from a focus on the situated, dynamic and contested take on practice to default instead on fixed and agreement-driven views of practice. This is the case when we participate in the reducing of that which is dynamic to something stable. In the name of making things actionable, we succumb to the desire for standardization and codifiability, naturalizing notions of practice, treating practice and the orders produced as self-evident. The result of this is also a potential risk to the value of our work. It is a risk remarkably similar to the above, that what we produce we produce without the distinction promised from rendering meaningful and deeply informing understandings of social practice. The concern is that we bring instead a more general analytical capability and knowledge (in such areas as trend analysis, decision making, segmentation, or the logic of task decomposition and redesign), offered with a twist and sprinkled, predictably, with quotes and photos of people in the field.²

Exploring this conundrum requires exploring the uses and meanings of notions of practice in the worlds of theory and the worlds of business³. This high-level look at and rendering of the notion of practice at work in business and in scholarship aims to give dimension to consideration of our value to industry as well as our value to advances in social and cultural theory. This paper pivots primarily around the intersection of notions of practice that emphasize flexibly and situatedness with those that instead emphasize ‘codifiability’. This focus is intended as a means to constrain this dissertation-worthy topic to a conference-size paper. It is moreover selects because this particular intersection may help to crystallize some of the as yet unresolved tensions in the domain of ethnography and industry.

In order to explore this intersection, it is important to first establish where the notion of practice shows up both in the worlds of ethnographic practice in industry and in the business world more

² In exploring the “truth effects” of typical ethnographic conventions of use of photos, quotes and the “say-do” distinction, Nafus and Anderson brilliantly exposed similar concerns in their 2006 “The “Real” Problem: Rhetorics of Knowing in Corporate Ethnographic Research.” They point to the risks that a certain naturalization of ethnographic approaches ends up in the “at its worse a kind of butterfly-collecting that surprises no one.” (p. 256)

³ I refer to “the worlds of theory” and the “worlds of business” with a large dose of tongue-in-cheek. Beyond confirming that I am following the trajectory of theory evolving through Bourdieu and Giddens, for instance, more so than that of symbolic interactionists and ethnomethodologists (Wynn 1991), I must note that there are in fact as many dimensions to theories of practice as there are debates about them. Ditto notions of practice in business.

broadly. The next two sections endeavor to describe where practice does indeed show up in each setting.

PRACTICE IN AND AROUND ETHNOGRAPHY

In what ways does the notion of practice inform our work? For many ethnographers in industry practice has served as both the object of analysis as well as a framing perspective. The notion of practice is referenced in many dimensions of our work: from the way objects and tools are used to descriptions of everyday performances of work and consumption to a sense of “the informal” more generally. We center attention on the “everydayness” of what people do, even if it is the everydayness of extreme or rarified contexts such as marathon runners or elite executives. The notion of practice is often mobilized to contrast with idealized notions of process, with processes being represented typically by (often overly) linear, branching, and step-wise flow diagrams. While such diagrams remain powerful in highlighting and reducing possible sites of action, they are also guided by assumptions of rationalistic, rule-bound behaviors. These, in turn, are often felt to be quickly exceeded by the realities of human action. In contrast, we use the notion of practice, then, to illuminate both the apparent messiness of what people do (and say and think), and to suggest the often unexpected and sublime order(s) of that messiness and we translate this understanding into recommendations, strategies and designs by identifying levers for support, adapting, or transforming those practices.

This approach to practice echoes much of what is suggested in traditions of practice theory common to the fields of anthropology, sociology, cultural theory and philosophy and whose development is closely tied to such theorists as Pierre Bourdieu (1977) and Anthony Giddens (1979, 1984). Commonly described as a theoretical orientation that arose in an effort to bridge the space between the social determinism of certain forms of structuralism and the psychological or cognitive determinism apparent in methodological individualism, practice theory has endeavored to reconcile influences of external social structures with subjective experiences. The aim was to make room for the role of the individual, for agency and subjective experience, without naively minimizing the powerful influence of social structures. The body is often central to definitions of practice. Following a trajectory through Bourdieu, Giddens, Foucault and the contemporary social philosopher Theodor Schatzki, John Postill defines practice as “arrays of activity in which the body is the nexus” (2008). Importantly, however, the body is not just complicit with reigning social orders but plays a role in recreating these structures. Given that people-in-action feed back into the system, there is room for agency to reassert itself. People are neither passive dupes nor entirely free will-driven actors possessive of pure individual choice. “Relational thinking” (Osterlund and Carlile 2005) between agents and structures and among acting agents, frames the core analytical approach binding variations of practice theory.

In what way and why has industry and business cared about this terrain of thinking? This question at large, addressed under the rubrique of what I have coined “the corporate encounter”, has occupied my interest for some time. A particular set of historical confluences has contributed to the growth of interest in more practice-sensitive views within the business world. I explore several of the key factors in more depth elsewhere (Cefkin 2009). Amongst these are: increased confrontation with consumers’ (both individual and enterprise) meaning-making influences in varied, global contexts; the spread of the internet and the increased speed and ease of non-local production and consumption; and the shift

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towards a greater focus on services and experiences. At the same time, driven by concerns for scope and scale, typical business approaches lean towards largely abstracted understandings. Surveys, where people's perceptions are solicited through already constituted frames of understanding, for instance, and process flows, conceptualized as linear, branching, and step-wise diagrams, speak to this tendency. Another factor at play, and at the opposite end of the above, is the fetish of the individual, the sense that tapping into an understanding of what people will do and how they might intersect with the organizations offerings requires 'getting into their heads'. This paper points simply to the sense that the promise of ethnographic work is its ability to stem the distance between broad, macro-level perspectives of people's actions and highly individualistic perspectives. This promise has particular salience vis-à-vis the industrial psychologists, economists, and human factors specialists who have been on the scene longer than ethnographers and whose viewpoints and approaches embody the kinds of perspectives just noted.

Ethnography is often poised to render something in-between these two extremes of faceless, broad generalizations and highly individuated understandings, and that is done in part through ethnographers' renderings of the changing messy space of activity into meaningful chunks through a focus on practice. Practice is what we are looking at when we are observing. We look for how things unfold in varying contexts and in interaction with a range of conceptual, digital, or material objects and artifacts. When we describe everyday performances of work and consumption, we aim to encompass not just the conscious and articulated dimensions of those performances – or people's explanations of them – but also what they do. We aim to expose the informal or the invisible, which we access, in theory, through a focus on practice. We may talk in terms of actions or behaviors, but in general, what differentiates ethnographic approaches from more cognitively or psychologically driven notions of behavior is that we are likely to foreground interpretations through a social lens, that there is cultural or social meaning framing individual's thoughts and actions.

Donna Flynn (2009) brilliantly explores this dynamic at Microsoft in the context of IT in her work "My Customers' are Different! Identity, Difference and the Political Economy of Design" where she describes the resistance she faced to the results of her study of server clients' use of user documentation that identified significant commonalities in documentation usage. Her business counterparts insisted that their customers – defined in terms of server type – were different. In addition to a kind of exceptionalism invoked by employees' singular identification with their customer group (in many cases because they had themselves come through those ranks), she traces the hold of this kind of thinking to what might be considered forms of methodological individualism instantiated in corporate processes. Amongst these she points to the performance review process, which, while gesturing towards the importance of collaboration, in fact is designed to reward singularly contributions, to the founder-worship of "billg"⁴, and to the popularity of the use of personas in the design practice and which focus attention on individual, representative, profiles of customers and users. The unit that matters most is singular, the individual. She uses this understanding to expose the particular political-economy of design in which her applied ethnographic research is engaged. And she

⁴ "billg" is the email moniker of Microsoft founder Bill Gates.

demonstrates how this understanding informs her own ability to act and effect change in her organization.

PRACTICE IN AND AROUND BUSINESS

So if that is where the notion of practice shows up in ethnographic work in industry, where does it show up more broadly in business itself? A number of notions of “practice” are at play in the business world. Practice is recognized as the site of action, of doing something and “getting the job done”, as ex-eBay CEO Meg Whitman has adopted as a mantra in an effort to distinguish her suitability for the role of governor of California from her opponents. ‘Putting something into practice’ is considered a good thing in business. Practice here contrasts with theory and is highly valorized as a corrective to the kind of ‘analysis-paralysis’ felt to come with the ‘ethereal’ realm of theory.

Another way that the notion of practice comes into play is through ideas of self-development. Practice is identified as a form of learning, developing skill by rehearsing, or ‘practicing’. In this case, the dominant response by the organization has something to do with capability-building, and it often fits most squarely in the worlds of human resources and training for internal purposes, or user support and adoption for product use. Practice and practicing becomes a means of harnessing capability to improve organizational functioning, on the one hand, or a route to effective product use on the other.

Yet another notion of practice points to it as simply the way things are done. Practice gets recognized here as specific constellations of actions (practices) informed by and found in specific contexts; the ways certain segments of customers take up and use products and services in distinguishing, brand-relevant ways, for instance, as in that embodied in Volkswagen’s slogan “On the road to life there are passengers and there are drivers. Drivers wanted.” This is the notion that most closely aligns with that of the ethnographer informed by theoretical orientations of practice. In this rendering, practice is often viewed as interchangeable with notions of culture. Telescoping the way in which culture in organizational contexts is heavily invested as a potential site and/or mechanism for transformation, this notion of practice also often carries with it a sense of the potential for change. It is identified as a site, then, for active direction and management. Indeed, a very typical response in business to practice when understood accordingly is to endeavor to discipline and standardize – even automate – it.⁵ This meaning of practice carries with it the sense that there are certain ways of doing things that can be changed, eliminated, codified and made sharable, as is illuminated by the notion of Best Practices.

A best practice is a **technique**, method, process, activity, incentive, or reward that is believed to be more effective at delivering a particular outcome than any other technique, method, process, etc. when applied to a particular condition or circumstance. The idea is that with proper processes, checks, and testing, a desired outcome can be delivered with fewer problems and unforeseen

⁵ A related notion of practice, and which shares as well in capability-directed notions, is that of a practice as a coherent domain of expertise, such as a consulting practice, medical practice, the user experience practice, and so on. Bezaitis (2009) recently explored dimensions of ethnographic praxis in industry from this standpoint.

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complications. Best practices can also be defined as the most efficient (least amount of effort) and effective (best results) way of accomplishing a task, based on repeatable procedures that have proven themselves over time for large numbers of people." (Wikipedia)

If you take away "best", that leaves a more general sense of the meaning of practice in this regard:

"A best practice is a technique, method, process, activity, incentive, or reward ~~that is believed to be more effective at delivering a particular outcome than any other technique, method, process, etc. when applied to a particular condition or circumstance. The idea is that with proper processes, checks, and testing, a desired outcome can be delivered with fewer problems and unforeseen complications. Best practices [are the] can also be defined as the most efficient (least amount of effort) and effective (best results) way of accomplishing a task, based on repeatable procedures that have proven themselves over time for large numbers of people."~~

Several notions follow from this rendering of practice. First, there is a promise of *manageability*, for instance, through "incentive" or "reward" and by way of "processes, checks, and testing". Practice can be controlled. Second, there is an assumption of a certain degree of *fixedness* ("the way of accomplishing a task" through which "an outcome can be delivered"). Practices repeat, and become identifiable, a sense frequently extended to a sense of cultural identity (e.g., "The HP Way" was a commonly understood notion of how the Hewlett-Packard organization operated and conducted itself.) And third, when extended further, one can see how this view contains a sense of the possibility of *interchangeability* or *fungibility* between practices, substituting them until desired outcomes are achieved. In total, practice emerges from and gives rise to *standards and rules*. In this construct, learning and knowing about the standards and rules is seen to be more a matter of personal development (from novice to expert) than of social and cultural distinctions. It is easy to see, then, how the notion of practice in this use shifts from one formed from a situated, dynamic and contested perspective formed relationally between agents and broader social systems, to one arrived at prescriptively, understood to be formed by a cumulative set of individual actions, and which strives for codification, standardization and control.

THE CONUNDRUM AT WORK: AN ILLUSTRATION

As a reminder, the concern of this paper is that notions of practice at play between theoretically-informed ethnographers in industry and our practically-oriented business counter-parts demonstrate potentially confounding similarities and differences, leading to the potential that our work fails to fully realize its value either in commercial contexts and in theoretical realms. To explore this conundrum more directly in terms of how it plays out, I thought it fairest to pick on myself. I use a case from my own work, an aspect of which was discussed previously at EPIC (Cefkin 2007). This case is suggested not because the work is so significant nor that it occupied that much of my work life (it did not), but because it exposes some of the challenges I have been speaking to above, and particularly wrestles with the questions of standardization and control.

The case at hand concerns collaboration practices amongst sales teams. I previously explored this case at EPIC (2007) focusing on the rhythms of sales work and particularly on sales pipeline management meetings. Known in some contexts as the “cadence” process, I argued that the sales pipeline management, and particularly the meetings, structure a certain experience for sales people in relation not only to their own organization but to the market more broadly. Participation in the process the meetings functions not just to fulfill needs for knowledge sharing and communication, but more generally creates a sense of the possibility for and urgency of action in the marketplace. I proposed that in trying to grapple with corporate dynamics ethnographers in industry would do well to pay attention to the ‘rhythmscapes’ of work.

But there was more to that study. In another context, we⁶ analyzed this data towards more immediate organizational concerns. In that instance, our analysis of sales pipeline practices and tool use allowed us to address a particular question of organizational import. The question concerns how the existence of a standard process designed around a standard tool effects organizational relations and the effectiveness of knowledge sharing (Cefkin et al. 2007).

As good practice practitioners we exposed “arrays of activities” ranging from the deployment of specific technologies to resource use by people before and after meetings to practices of talk and performance within the meetings. We suggested how structures, from hierarchies and regimes of authority to the rhythms of the stock market, effect what unfolds. And we described and visually represented two distinct ways in which teams collectively engaged sales pipeline activities. We named these the “Do-it-Alike” and “Do-it-as-You-Like” approaches and explored how they varied across five key dimensions: 1) styles of recording information, 2) roles and responsibilities for managing information, 3) dissemination of information within the team, 4) artifact use in reviewing the pipeline, and 5) focus of the pipeline reviews.

In terms of exploring tensions between flexible and codified notions of practice, one of our notable findings was that the enforcement of the supposed “standardized” approach to pipeline management required more, not less, interpretive work throughout the system. The representation highlights key inflection points when passing standard information (the same size and color box) through chains of people. We suggested that the “Do-it-Alike” approach demonstrates ways in which information is invested with different meanings, some related specifically to other bits of information. When transformed into a system that uses its own logic (forcing information bits into the same shape and color, so to speak), rather than that of the context of the information itself, recipients of the information have to first interpret the information already residing in the system, and then figure out what they need to do to modify and add to it. In contrast, when presented with the information in its varying, but situationally-appropriate forms (different shapes of the same color of information), as suggested by the “Do-it-As-You-Like” approach, productive energy is invested in adding to and modifying the information, rather than first having to make sense of it.

⁶ The paper referenced here was prepared together with my colleagues Jakita Thomas and Jeanette Blomberg. I take full responsibility, however, for framing up the treatments discussed, and critiqued, here.

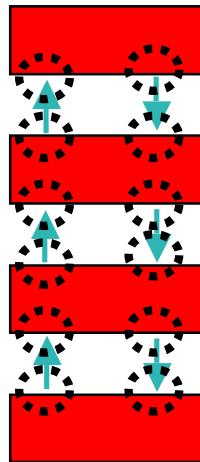


Figure 1. Do-it-Alike process for updating the CRM tool with interpretation and translation points circled (Cefkin et al. 2007, p. 66)

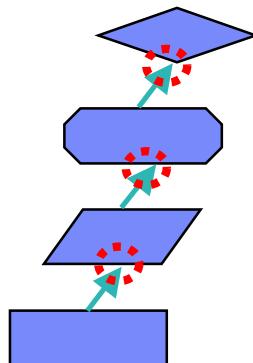


Figure 2. Do-it-as-You-Like approach to updating sales opportunity information with translation and interpretation points circled (*ibid.*)

But what kind of rendering of practice do these mini-models really represent? How different are they from other kinds of codifiable, or “best”, practices, suggesting an easy interchangeability: ‘do it this way not that?’ Does our focus on practice end up aligned with a process-driven view of fixed and cumulatively derived individual actions? Where in such representations do we identify the broader social and cultural structures that interactively inform the development of practice? Are we on the verge of leaving behind broader social and cultural dimensions all together?

So that points to one set of concerns; how practice is reified and rendered. Another set of concerns involves our prescriptions, what should be done. Of interest here are the concluding “implications” of that article. The first was precisely as described above, “Design tools and deployment strategies to allow flexible use and application.” (Cefkin et al. 2007, p. 67) The concern is not that this recommendation could not have been actionable; indeed had we been invited to⁷, we could have suggested specific ways to design and deploy the tools and processes of sales pipeline towards greater flexibility. Rather I am questioning whether and how our focus on practice, rendered into the common lessons of flexibility, situatedness, and change, may limit where and how we are able to participate in the conversation. Does it contribute to ethnographers in industry being positioned as technicians, problem solvers for addressing immediate issues, rather than holders of vital social and cultural knowledge worthy of broader strategic consideration?

The second implication of our article is perhaps yet more intriguing. It read: “Consider variable implications of tool and process adoption on the division of labor.” (*ibid.*) Was this our back-door way of bringing the politics of practice analysis into the picture? Our point was to show that the different forms of practice that develop in conjunction with use of the same process and tool led to different roles and responsibilities for actors in the system. While this is true in any situation, this case revealed that the standardized approach, as we observed among teams, lead to certain people ending up in the role of information police. In some cases, contestation over process and procedure emerged among team members who were meant to act collaboratively towards clients’ and the companies’ interests. Here we gestured sincerely towards the broader structuring context, towards corporate structures and process and hinting more broadly, even, towards the affects of hierarchical systems of operation, but the question remains, given the applied business context, towards what ends were such gestures aimed? Dynamics concerning such conditions as hierarchy, power and relationship are not readily addressable by technicians and demand reconciliation of broader social and cultural dynamics beyond the control of organizational boundaries. Such so-called ‘externalities’ are often viewed as beyond the scope and scale of concern of organizations, let alone the ethnographic practitioner. Does our position end up relegating us, then, to only residual or secondary value?

PRACTICE IN AND AROUND THEORY: TOWARDS NEW QUESTIONS

So where does this leave us? As explored above, businesses take practice as a resource that can be optimized and manipulated. Theoretical orientations of practice describe the actions constructed by actors in relation to specific social orders and thus conclude that practice is situated and changing. So this paper ends where it began, by posing the twinned set of questions, now more fully explored: does the work performed by ethnographers in industry have anything to offer in refining, critiquing and advancing theories of practice? And have we exploited the full potential of theories of practice towards

⁷ The focus on pipeline management practices fell out of a broader study on sales team collaboration. Impacting the specific tools and processes of sales pipeline management directly would have required involvement with portions of the organizations unfortunately out of scope for this study and its follow-on efforts.

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advancing meaningful differentiation of our value to business by contributing unique perspectives on business practice? That the answer to both of these questions may be something less than a resounding “yes”, I have been trying to suggest, can be felt as a conundrum. We remind people that “it’s about the journey not the map”. We remind them again. And we help design and support those journeys. These are, no doubt, the “right” answers. But they may not be the only answers. Are we losing site of the maps altogether?

So what is to be done? Rather than end on this note of conundrum, allow me to suggest two possible levers for advancing beyond this state of affairs. The first lever is suggested by the core theoretical treatments of practice identified earlier (indeed I am thus suggesting that ethnographers in industry go deeper into, rather than retreat from, theoretically construed notions of practice, a provocation undoubtedly counter-intuitive to many applied practitioners), in particular, accounting for structures of power. That tools such as sales pipeline management information systems, for instance, are used in particular, but broadly existent, axes of power, means something. That reward systems, structures of authority, and organizational expectations about proper and improper comportment exist, matters. Such dynamics are not limited, of course, to organizational contexts; Johnsen and Helmersen (2009) vividly revealed how families in “bottom of the pyramid” contexts end up buying and transporting small units of products used in daily life such as produce, dairy, and oil. Such observations disrupt the overly-easy identification of people’s actions as fixed, fungible and manageable. At the same time they point to the powered, persistent structures and systems which, if transformed, may have significant impact. By avoiding naturalistic, reductive treatments of practice and instead recognizing the powered dimensions of their existence, might not our work better realize the transformational power to change structures?

The other lever is suggested via the corporate ethnographers’ participation in and through business and organizational entities (and should help to reassure that I am not advocating a politics *qua* politics alone). Indeed the name of the game is to perform, to make change, to innovate – this is as true for ethnographers in industry as it is for others. In essence, then, we are invited to participate in transformation. And the site of that transformation might at times be less the near-at-hand actions of the subjects of our ethnographic inquiries, be they consumers or workers, but instead (or in addition), broader structures. Taking seriously the agent-structure dynamic at the heart of theoretical orientations to practice, we should continue to recognize the power of our own agency, and grasp the opportunity to participate in co-evolving those structures.

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Pecha kucha presentations

Dave McCaughan, Curator

RE-TRACING THE PATH TO NOW

ELIZABETH ANDERSON-KEMPE

Artemis Research by Design



Designers present portfolios, architects show buildings, filmmakers screen films. For the researcher, pointing to a visible history of project work is challenging – visual models, findings, photos and videos, almost all are the intellectual property of clients. Rather than attempt a portfolio of project work, I tell the story of my last 13 years as an ethnographer through ideas, events, people, places, projects and company cultures that have shaped my professional life in research. Through words and images, I highlight transition periods: from academia to consulting, from boutique agency to large technology company, from corporate culture to running my own business. It is during these periods that I've had to reflect most deeply on the value of ethnography in industry, reassess my professional goals, and adjust my practice to adapt to new contexts. The images used to tell this story come from personal project archives, my Polaroid-photo library, and various open sources.





BUILDING ON TRADITION

JENN SCHIFFMAN

ROBERT ZOLNA

Gravitytank

"Well we might say the art world reflects our world culture. And because our world culture is changing - the world is becoming flatter, our nation is becoming more diverse, a true melting pot is occurring - art is going to change as well." - John Maeda



Similar to art, research (and the way we do research) reflects our constantly changing world. We are constantly thinking about how our research process could be improved, so we look at what we do with a designer's eye, drawing inspiration from other industries and the world around us. So, as our practice continues to bring new industries into the fold, what we call ourselves - "ethnographers", "design researchers", or something else - could evolve as well.

This Pecha Kucha, presented by a researcher and a designer, will highlight various sources of inspiration from different industries - travel, entertainment, social networking - and how we used these sources to create new ways of working through the research process.



PICTURING ETHNOGRAPHY

ALICIA DORNADIC



Ethnographers can use art to bridge gaps between data collection and representation as well as between ethnography and design. Art, as artifact, provides ethnographers a view into human memory, experience, and emotion that goes far beyond investigating human activities, wants, and needs through interviewing and observation alone. Art theory and formal analysis offer a set of tools to tell stories visually and to translate research findings that spark design concepts. Understanding how aesthetic preference relates to experience can also inform aesthetic choices when designing products, services, and spaces. Since art is highly subjective and provocative, it becomes at times an unwieldy tool which raises questions around its application in ethnography. For example, ethnographers should consider that the message an artist is trying to convey may contradict viewers' interpretations of a work. Selecting visuals to represent research can be quite complex when one image sends several different messages, and there is always the danger of oversimplifying research findings through ambiguous or flat visuals. These twenty images explore how pixels, brushstrokes, and color tap into larger social issues ranging from type 2 diabetes, obesity, and AIDS to dark alleys, women's rights, and campus design.



18 MINUTES

MICHAEL PENG
IDEO



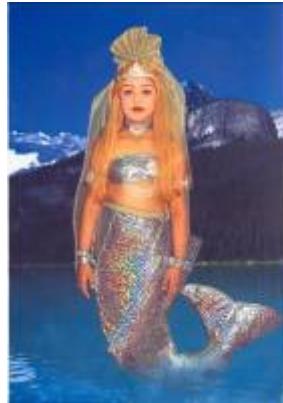
It takes me exactly 18 minutes to walk from my apartment in the West Village to my office in SoHo. In just those 18 minutes, I find myself immersed in a flow of people, wondering about how we might design enhanced and richer experiences for them. How might we help people navigate through the city? How might we create new ways for people to interact with stores? How might we help people engage all their senses when walking around the neighborhood? In the following slides, I will take you on my daily walk – through the streets of downtown New York – and show you how in just 18 minutes (and a landscape full of inspiration), some interesting opportunities may form.



ETHNOGRAPHY OF PHOTO-MIXING: THE DIGITAL PHOTO STUDIO IN INDIA

NIMMI RANGASWAMY

Microsoft Research India



For almost a decade, the analog photo studio in India began to change technology tracks to digitize the business of making and printing photos. Not surprisingly, the demand for photos increased as *Photo Shopped* photo-situations proliferated. We identified a specific emerging market for digital photo alterations and further marked out its dominant preferences and tastes. Through ethnographic reportage we detail the various types of demand for ‘alterations’ and ‘customizations’ to meet specific preferences. We attempt to thematize and contextualize the following:

1. The range of photographic mixing and makeover in the emerging client market for digital studios
2. The specific kinds of trick photography
3. The immense potential these specific preference hold for customized design implications.

In this presentation we make available an ethnographic & visual reportage of the possibilities of configuring a specific emerging market of *photo-shopped* pictures.



SKEUOMORPHS AND SPRANDRELS; EXAMINING THE INTERACTION OF CULTURE AND DESIGN

JOHN PAYNE

Moment Research



After recently stumbling on these two concepts, Skeuomorphs and Spandrels, I was struck by how they illustrate ways that culture and design interact in the adoption of new technology.

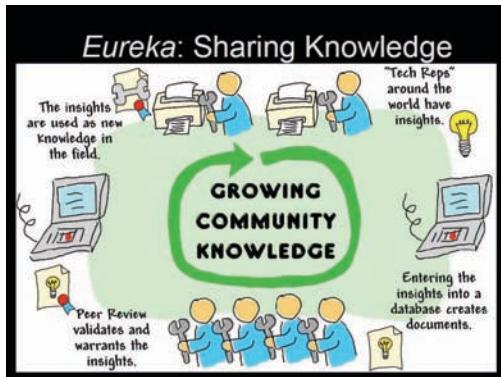
Skeuomorphs—features of technological artifacts that have lost their functional purpose but been retained in later generations of that artifact nonetheless—leverage a historical precedent in order to communicate a functional or cultural value to consumers. This approach simplifies adoption by using the consumers' own prior knowledge to mask the new with the familiar.

Spandrels—features of technological artifacts that have been retained because they have taken on some new or different functional or cultural value than that which was originally intended—leverage the consumers' own creativity to imbue an artifact with utility where none existed before. This approach simplifies adoption by outsourcing the innovation to the consumer who then creates the new directly from the fabric of the familiar. Each concept illustrates how we can consider the consumer a participant in the innovation process, and provides a potential approach to imbue the objects we design with the functional or cultural value necessary for adoption.



Dō; REFLECTING ON THE PATH OF AN ETHNOGRAPHIC COMMUNITY,

PEGGY SZYMANSKI, BRIGITTE JORDAN, and AKI OHASHI
PARC



Palo Alto Research Center (formerly Xerox PARC) is well known as the birthplace of ethnographic praxis in corporate research. PARC Dō is our way of doing ethnography; over the past 35 years, our ethnographic community has grown, adapted, and established a rich heritage of methods and applications. This presentation overviews the path that PARC has traveled in the past 35 years, highlighting some of the most notable theoretical contributions to the field such as Brigitte Jordan's Interaction Analysis Labs and Mark Weiser's vision for ubiquitous computing that inspires human-centered design today. We discuss our ways of working now, including how we engage clients for exploratory studies and technology development. Here, we use case studies to illustrate how the flexible adaptation of our methods has resulted in new product design, deep insights for long-term research, and organizational transformation. We share our vision for the future of ethnographic work at a hybrid research institution such as PARC. Not only are the field sites for doing ethnography changing with on-line communities and human-robot interaction, but ethnography's value in the industrial research cycle is also changing as companies seek engagements that train and certify their employees in the use of ethnographic methods.

From Workscapes... to Lifescapes



Paper session 2: Pioneering the path

Armin Moehrle, Curator

Becoming the Subject: A Comparison of Ethnographic and Autoethnographic Data for New Product Development

KEREN SOLOMON

As companies become more interested in innovation, design, and the creation of experiences, they are increasingly utilizing ethnography as a way to understand their customers and potential customers. However, for most companies ethnography is still conducted in the classical sense, with researchers observing and talking to participants in order to draw out insights about the “other.” Few consider the use of autoethnography, that is, having people deeply and rigorously study themselves in order to produce a richer description of the problem space and of how new products might potentially solve those problems.

This paper draws on two research projects conducted by the author, compares the data collection methods and research results obtained with both approaches, and suggests some ways in which using an autoethnographic approach could lead to more insightful research results. It also raises questions about how we as researchers can increase our understanding of and respect for what it really means to be a research subject.

INTRODUCTION

Years ago, I conducted ethnographic research for a company that wanted to develop new products for breastfeeding mothers. Specifically, the company was interested in developing products that would help nursing mothers save, store, transport, and use pumped breast milk.

Last fall, I had my first child. I knew that I wanted to breastfeed and I knew I would be returning to work. When I first thought about pumping, I was reminded of the earlier research I had done, and I thought it would be interesting to re-examine the topic. As professional researchers, we are quite comfortable going into the field to study “real people” (Nafus, 2006) and what they want, but we less frequently engage in a deep process of self-examination, self-reflection, and self-study. In fact, we often explicitly step back and separate ourselves from the participants – we don’t want to taint what the participant does and we want to have empathy but remain objective, and so on. I was curious to learn what it would be like to experience a research project as a participant rather than as a researcher.

I decided to document my experiences, to do an autoethnography.¹ Would I see different problems and opportunities than I had seen when I did the earlier research? Would I modify how I

¹ There is an ongoing, and unresolved, debate about the exact meaning, parameters and implications of the word “autoethnography.” Without getting drawn into the arguments of Ellis, Denzin, Anderson and others (see the *Journal of Contemporary Ethnography*, 2006:35), for purposes of this paper I use the term “autoethnography” to mean

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conduct research in the future? Would there be any benefit to companies of using this autoethnographic approach, and if so, what would that benefit be? What are the key takeaways and insights for us as ethnographers about autoethnography? These were some of the questions I wanted to explore.

In this paper, I will share some details and learnings from the two research projects. I will also provide some food for thought for practicing ethnographers as we work with research participants and clients.

DESCRIPTION OF RESEARCH CONDUCTED

In both cases, the goal of the research study was to understand the daily life of mothers who wanted to provide their babies with pumped breast milk. The focus was not the pump itself, but rather the overall milk management process. In both cases, while the mother was the primary participant, data were also gathered from husbands² and caretakers. In both cases, I also explored mothers' emotions and beliefs in order to understand the deeper meanings around the milk management process. Finally, I tried to understand what influenced milk management-related purchases and decision-making.

The research protocol for the ethnographic study was designed to trace the behaviors of mothers from the end of their workday until they went to bed at night. Participants completed a photodiary assignment, in which they took pictures of people and things that they believed were important to the feeding process. We conducted ethnographies – starting at day care, when the mother first picked up the child, through the commute home and evening hours, and concluding when the mother indicated her day was “over.” We also interviewed both parents (mother and father) and did a home inventory of milk and feeding related products.

For the autoethnography, where I was the object of study, my research protocol was slightly different. I kept a diary about my experiences, capturing my behaviors and emotions in detail for a period of about six months. There was no fixed beginning and end point, nor did I have to complete a certain number of diary entries. For the first three months or so, I wrote something at least once a day (often more), and as time went by I wrote every other day or every few days. Because this was an autoethnography, I did not formally interview or observe other people, but I did reflect on and analyze

research conducted in a natural environment using oneself as the subject of study, i.e. the research participant. This is in contrast to research in which the researcher is explicitly recruiting and studying participants. In addition, for purposes of this paper, I limit my discussion of autoethnography to how it can be successfully employed as a research method in corporate settings, without going into broader implications for the fields of anthropology or sociology. My usage of the term “autoethnography” should not be construed as an endorsement or critique of any particular theory or philosophical viewpoint.

² For this study, the client's primary criteria were household income, education level of mother, current age of infant, and milk feeding practices. Although the screener did not include specific questions around household composition, all participants were in married, heterosexual relationships.

how others were involved and what that meant. Throughout, I also documented my experiences through photos, videos, and audio recordings.

DATA COLLECTED AND INSIGHTS

For the original research project, we collected extensive data about the process of saving, storing, transporting, and using pumped milk. These data included information about the actors involved, the time and timing of different actions, the artifacts used and produced, and the needs, likes and dislikes related to each step of the process. As a deliverable, we produced a set of process maps showing all the steps in the end-to-end process, from when the milk was pumped to when it ended up in the baby. We also detailed what happened to the things that were used along the way, from pump parts to storage bags. In addition to the process maps, we created detailed profiles of each mother, with demographic notes, behavioral data, and notes about her worldview and likes, dislikes and pain points. These were presented to the client, along with our insights and ideas for future products.

Overall, I found that the data gathered during the two research projects was similar in nature. In both cases, I ended up with extensive data about the milk management process – what happened, the tools involved, the frustrations and pain points. For example, there was a consistent feeling among research participants that transporting milk was time-consuming and difficult, a feeling I observed in myself as well. Here is a sample entry from my diary:

“AAARGH! I can’t believe it. I forgot to bring bottle tops to work today! Now I have to pump and cover the bottles with something, then put them in the back of the fridge so nobody knocks them over, then make sure I don’t spill the milk on the way home. This happened once before – I was meeting [a friend] for lunch and first I forgot to bring the pump so I had to go back home. That made me late, so I was in a huge rush so I threw everything into my bag and ran out the door again. After lunch, I pumped and then looked in the bag for the bottle caps only to realize that I hadn’t packed them!! So I ended up improvising – I took some tin foil (which I happened to have because I had brought some carrots as a snack), covered the bottles with a clean part of the tin foil, wrapped a rubber band that I found in my knapsack around the tin foil, then put the bottles in my bag. Then I put the bag in the front passenger seat of the car, put the seatbelt around the bag, and drove home. I have to say, I felt very clever. Now I need to improvise again. Sigh.” (February 17, 2010)

I also found that the artifacts were similar – the tools I used for milk management were similar to the ones used by research participants in the earlier study. For example, I had a large number of bottles and parts. I generally labeled the bottles for day care in a similar way as other mothers did, and used freezer storage bags as they did.

However, I did gather some data that were different. I have multiple photos of myself, showing the various locations and pumping-friendly (or non-friendly) set-ups. I took photos of myself using the pump and taking care of the milk at home, at work, on airplanes, and in closets. Not surprisingly, these personal photos and environmental context was much easier to get and to document when I was

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the participant. I also have multiple audio recordings, which I made as little snippets of conversations and random thoughts. Because I had a cell phone with a camera and an audio recording feature, I was able to capture a lot of data “in the moment,” when my actions and emotions were very fresh.

In terms of the insights, there were also many similarities between the two projects. In both cases it was clear that mothers were overwhelmed with information from multiple sources about the milk management process, baby bonding, nutrition, and about breastfeeding in general. A key insight in both cases was that mothers didn’t need more information, but they did need a way to check and trust the information they were receiving. I found that many of the comments I had previously heard from participants resonated as true for me as well. I had both positive and negative emotions around pumping and managing milk – it made me feel good about being a mother, confident about my ability to provide for my child, and independent. It was also a hassle, with lots of frustrations, anxiety, and room for improvement.

However, there were some important insights that I gained from the autoethnography that had not been apparent during the original ethnographies. For example, when analyzing my data, I realized how much of my decision-making was based on chance or circumstance, rather than on any well-thought-out logic. Here is a sample entry from my diary:

“[Today] I bought another pump from the [mothers’ group] list. Not that I need the pump, since I have [my friend’s], but now I have lots of extra bottles. That makes it a lot easier, since I don’t have to “ration” the bottles as much. It’s a good thing I was reading the list today...” (April 2, 2010)

Through the autoethnography, I also realized how much pumping and milk management impact one’s mobility and productivity. While pumps are marketed as a product that increases a mother’s ability to work and to get around without her baby, during the autoethnography it also became clear that pumping imposes restrictions as well. (In hindsight, I wonder if we were less likely to see these problems because our client’s business was predicated on playing up the benefits and advantages of pumping, and of playing down the challenges.)

REFLECTIONS

About the Findings

As noted above, in general, much of the research data and insights from the autoethnography confirmed the research data and insights from the ethnography. But, without a doubt, I did see additional things, different nuances, or new connections. For example, in the ethnography, one of our team’s conclusions was that managing the pumped milk was not as hard as pumping. However, in my own experience, the actual pumping was quite simple (though boring and time-consuming) and it was the rest of the milk cycle (measuring, storing, project managing) that was very time-consuming and mentally taxing. With the benefit of my personal experience, I might have framed the original finding differently, with more emphasis on the post-pumping steps.

As another example, while doing the autoethnography, it struck me how much more I thought about other principal actors in the milk ecosystem, such as the father/husband, or the day care provider. While these actors had been included in the ethnographic research, their participation was limited, and their behaviors and feelings were generally discussed in relation to the primary actor (the mother). It was only when I did the autoethnography that I realized exactly how large a role these actors truly played. Fathers/husbands and caretakers had a significant role in managing the milk and the milk-related artifacts (bottles, nipples, storage bags, etc.), providing opinions about the breastfeeding and pumping process (sometimes when asked and sometimes when not!), making rules (how to label the milk, how to take bottles home, when to feed), and gathering and providing information about breastfeeding and pumping (from books, from friends, from other mothers at day care). The original ethnographies had led us to believe that the mother is the primary actor in the milk management system and that other actors are subservient, whereas during the autoethnography I soon realized that the father has at least an equal say. And in the ethnographies, we rarely gave more than a short acknowledgement of the baby, whereas in the autoethnography, I realized that my son was a key actor.

Moreover, there were some secondary actors that didn't really surface in the ethnography, but who I identified as quite important in the autoethnography (e.g. pediatrician, employers, parents, etc.). Were we to do additional ethnographic research, I would strongly suggest that we explore these people and their roles in greater detail.

In an autoethnography, emotional states are easier to recognize and identify. For example, in the original ethnographies, we noted that mothers get lots of information from multiple sources. In the autoethnography, I had an additional observation; namely, that mothers with young infants are generally quite exhausted, and therefore they are being deluged with information at the exact moment when they are least likely to be systematically searching for it. Based on this insight, one recommendation I might make now to a client would be to provide educational materials with fewer scientific details and more step-by-step details, using short sentences, assuming that the reader is both tired and may be interrupted at any time by a crying baby.

About the Process

I was unprepared for how hard it would be to “research myself.” Being the participant was fundamentally different than being the researcher, and it made me keenly aware of the burdens we may inadvertently place on our participants. We ask them to keep diaries, to recall minute details of their days, to share complicated behaviors and emotions in a concise manner that will give us “insights,” and on and on. We believe that participants are as interested in our topic as we are, and we believe that in return for compensation and our thanks, they will be as engaged in our research as we are. Doing an autoethnography was difficult, and made me realize that perhaps we need to adjust our expectations of what our research participants can reasonably do.

On the other hand, doing the autoethnography was also a joy. I felt that I understood the topic more deeply than I had before. I noticed new things and had a deeper appreciation for things that I had previously seen but not understood. For example, the daily planning was more complicated than I

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had originally believed. While it's one thing to create a process map, it's another to viscerally feel what it's like to be in a constant "project management" mental state. I found that I was thinking about milk all the time. It seemed like there were so many steps and things to consider at all points throughout the day, at times it felt like managing milk was a part-time job. The process maps surely did not do justice to this psychic weight.

As another example, when we conducted the original ethnographies, I believe that we underestimated the importance of mothers' groups. While mothers' groups played a part in our recruiting protocol and they came up in discussion, because of our fieldwork protocol we didn't have the opportunity to see our participants in a mothers' group context. In the autoethnography, on the other hand, I was keenly aware of how often I asked people in my mothers' group for information or relied on them for support. After my husband and friends, the people in my mothers' group were probably the largest influence on my knowledge and decision-making. These social influences are one thing that a fixed research protocol may miss.

Interestingly, during the autoethnography, it was sometimes hard to remember whether I was playing the role of participant or of researcher. There were times that I felt very clinical, detached, and factual, as if I were observing myself from a distance or conducting a usability study. I took notes about what didn't work and what could be improved, sometimes even jotting down a potential workaround or new product idea. In that sense I clearly felt that I was playing the role of "researcher," and the subject just happened to be myself. At other times, however, I was completely the "participant," entirely absorbed in the moment. For example, there was one day when I realized that my body was actually producing nourishment for my son, and that struck me as quite amazing and remarkable. At that moment, I wanted to write down how I felt, not for the research, but for myself.

Why did I feel that I was able to get deeper, richer insights through the autoethnography? First, I had a different level of "access" – I wasn't limited to the photodiary and ethnographic data that I was able to capture during a scheduled "fieldwork" session during a particular part of the day. I had access to myself from the moment I woke up until the moment I went to sleep, something we rarely (if ever) truly get with participants. I was also able to explore the role of the husband and of the day care provider in more detail because I had regular access to, and had built rapport with, them.³

³ The importance of access should not be underestimated. One of the limitations we had during the original study was in our ability to enter day care facilities. For security and privacy reasons, access to day care facilities is tightly controlled, and "outsiders" are not permitted. So, during the original study, when we were in a day care facility we were always accompanied by our research participant. We could make observations while she was talking to her child and to the day care provider, but we couldn't wander around or open refrigerators or peek into storage spaces. Nor could we take photos or video. In contrast, when I was conducting the autoethnographic research, by dint of my status as the parent of an enrolled child, I had complete access to the day care facility, could look at the daily status sheets of my son and of other children, and could take photos of milk management related artifacts. Because I was a parent, I also had access to information about processes breaking down. For example, at one point I received a series of communications from the Director about a mix-up with two children's milk bottles and what remedial actions had been taken with staff members. For confidentiality and liability reasons, it is not likely that this information would have been shared with me as an "outsider."

Second, in the autoethnography I engaged with the subject matter for many months rather than for a few weeks. (In fact, I still continue to write and capture data, nine months after I began. While I no longer write up my “field notes” every evening, my mind still refuses to declare that the fieldwork is “done.”) Many of the most interesting learnings emerged only over time, or months into the project. For example, about five months after I started, I had an “aha” moment when I realized that I could use one of the pump parts to transfer milk between the storage container and the bottle. In many corporate studies, I would have already ended my contact with the researcher by this time, and the insight would have been lost. This may argue for the increased use of longitudinal or long field studies in general. Unfortunately, this is not always possible in an applied research environment, given clients’ frequent need for quick insights and turnaround.⁴

Third, during the autoethnography I was more interested in the topic. As researchers, we tend to be curious, to find many things of interest and worthy of study. But in addition to being researchers, we are people too, and like most people, we tend to be most interested in those things that directly impact our lives. An autoethnographic study is inherently more “relevant” to us.

Fourth, conducting autoethnographic research was less “restrictive.” When we engage in ethnographic work for clients, we almost always have a tightly scoped research question. This scope is driven by clients’ business needs and project budget. We know that we’ll likely be studying consumer attitudes and behaviors, product opportunities or barriers. We know that our output will be personas, design principles, or possibly new product ideas. We create a fixed research protocol, and modifying it requires client discussions and perhaps new statements of work. We have limited time, limited resources, and a team that is eagerly waiting for us to produce. We can’t come back with findings that are interesting and important, but not “on-point.” In other words, the purpose of a client-sponsored study is “confined to advancing client-driven interests rather than those of a disciplinary, societal, or industry focus.” (Mariampolski, 2006) On the other hand, when I was studying my own experience, I had the freedom to explore whatever path or idea seemed interesting. I was not constrained by a fixed research protocol or set of interview questions, so I could think about the economics of breastfeeding versus using formula or the politics of paid maternity leave, rather than limiting myself to the milk management process and potential new products. From that point of view, I found that doing autoethnographic research was “intellectually freeing,” as it both deepened and broadened my analysis, my insights, and my understanding.

Fifth, I was able to find useful information in places that we often overlook, such as my daily surroundings and my social circle. Even extremely private activities, such as pumping milk, are always embedded in a social context. Family, friends, and other social networks define what is acceptable and desirable behavior (Squires, 2002). In the autoethnography, these social relationships and influences were quite obvious and illuminating.

⁴ For an interesting discussion on the value of long fieldwork, see the discussion “The proverbial year of fieldwork: is it necessary?” (anthrodesign, 2010)

THE “PARTICIPANT-OBSERVER” EXPERIENCE

One area I briefly wanted to touch on was that of the famous “participant-observer.” One of the questions that applied researchers must often grapple with is the extent to which the researcher should be a participant in the study (or not). In many corporate research projects, there seems to be a bias towards observing rather than participating. The researcher may describe himself as a “fly on the wall” or express a desire not to “alter the circumstances” while he watches the “user/customer/consumer in her natural environment.” According to this view, by playing a completely spectating role, the researcher sees “what’s really happening” without disturbing the participant’s actions. These “impersonal standards of observation and ‘objective distance’” (Clifford, 1986) were followed by early ethnographers, and may have recently regained some currency as more ethnographic work is conducted by researchers who come from human-computer or human factors backgrounds, with their emphasis on observation rather than engagement.

On the other hand, since Malinowski emphasized the importance of engagement and participant-observation, there are those who believe that attempting to keep oneself out of the research process misses a key point, and in any case may be both naïve and unrealistic. Actions are always framed by the “cultural notions” of the researchers and of those being studied (Sunderland and Denny, 2007). We contrast quantitative and qualitative research by recognizing that in the latter, the moderator/researcher is an integral part of the data gathering process, and may even “embody” the research (Coffey, 2007). Stoller goes even further. He argues that the “depth of an ethnography is related directly to the nature of the author’s participation in society,” and says that “participant-observation” is “anthropology’s most famous oxymoron.” (Stoller, 1989).

Agar suggests that:

“People necessarily exist within a tradition, in terms of which they see themselves, their world, their past, and their future. An individual can never stand entirely apart and examine this tradition as an object, for without it there is nothing in terms of which understanding can take place.” (Agar, 1982)

But, he continues, “Being enmeshed in a tradition does not mean that a portion of it cannot be brought to consciousness and reflectively examined.” (*ibid.*) Anderson suggests the idea of “engaged reflexivity,” (Anderson, 2006) in which the researcher engages with other members of the culture under study in order to better understand ourselves and our place in the group and in the broader world. In this case, the researcher comes not as the expert, but as the learner (Jordan, 2009), noticing and analyzing her own behaviors and attitudes, and how they change over time.

From this perspective, it seems that autoethnography is a logical extension of true participant-observation. And for those who lament the loss of self-reflexivity (i.e., “the constant questioning of one’s own assumptions, reactions, and distractions”) (Denny, 2006) in the research process, autoethnography may offer an encouraging step forward.

IMPLICATIONS

When considering the value and application of autoethnography, there are a number of things we should consider.

For Our Clients

Based on my experience conducting this project, I believe that autoethnography is an excellent research method to employ in product design and new product development work. Companies are increasingly trying to differentiate themselves through emotionally and situationally meaningful products and services, and autoethnography is a methodologically sound way to understand behaviors and beliefs. While companies often say they love their customers, and they may indeed do significant customer research, there is often a dividing line between us (the company, the product development team, the marketers) and them (the customers, the prospects). Autoethnography is a way to help bridge that gap.

While autoethnography can be used at a tactical level to learn how people use existing products, it seems equally if not more valuable when used to answer broad, exploratory, culturally-based questions about people's behaviors, beliefs, desires, and daily lives. It also works well when we are trying to understand important or life-changing issues – having a child, dealing with a disease, buying a house, starting a business; in sum, any issue that has a major emotional impact on the person experiencing it.

I believe that autoethnography works best, and perhaps only, when the person conducting the autoethnography actually bears some relation to the target customer and can provide information that is authentic. One heuristic we might employ is to ask ourselves “would I be accepted as a participant in this study based on the recruiting specifications?” If the answer is yes, then autoethnography may be useful. If the answer is no, then autoethnography risks becoming nothing more than a shortcut where the researcher is merely used as a proxy for “the customer.” We’ve all been in situations where somebody said, “well, this is how I’d do it” or “this is how my spouse/friend/child/[insert other person] does it.” Autoethnographic research runs that risk as well, and in fact may increase the risk, because it provides actual data that can be used to “support” an opinion or point of view. Moreover, I believe there is a limit to what we can understand about an experience that we have not lived ourselves. In the case study I used above, I was clearly the company’s target customer and would have easily qualified for the study based on demographic and behavioral screening questions. This is not to say that we can only conduct research on issues that we can experience first-hand; but it does mean that we might not be able to consider such research to be autoethnographic. And should we choose to conduct autoethnographic research as a way to understand the non-typical subject, we should be careful to note that fact.

Autoethnographic research is also an excellent way to do some due diligence and to “get up to speed” before we develop a full-blown research plan. Because autoethnography helps us better understand the issue we will study, we can have more productive, interesting, and impactful discussions with our clients in the research design phase. We can think about different research protocols and

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field methods. We can finesse the research objectives and questions to ask. This makes our ethnographic research more fruitful and effective.

There are of course objections to autoethnography.⁵ I could not disagree with these criticisms more. As noted above, autoethnography is a highly complementary research method to other methods. If we are able to add to the understanding of a problem through rigorously studying our own experience, then we owe it to our clients to do so.

For Us as Research Practitioners

The use of autoethnography brings up interesting questions for us as practitioners. Can we truly understand the experiences of customers if we don't use the products ourselves? How sensitive are we when we conduct research on topics that may be very personal and/or emotionally laden? What should corporate ethnographers realize when they ask participants to keep diaries or collect other research data?

For me, conducting this autoethnography highlighted the importance of, and the potential difficulty of getting, truly deep empathy for our customers and their challenges. It's one thing to hear somebody say "breast milk is liquid gold" and another to feel your heart sink as you knock over a bottle of pumped milk and 3 ounces and 40 minutes of effort splashes on the kitchen floor. I had no idea how disruptive it would be to pump, how much I would need to re-arrange my schedule, and make multiple scheduling decisions about my day, every day. I had no idea how much stuff I would need to bring with me when I went out, or how frustrating and stressful it would be to forget a part at home. I had no idea what kind of commitment it entails to pump month after month – I only really understood these things when they were happening to me. Moreover, there are times that we are asked to research topics that we have not or cannot experience first-hand. When a researcher rides a hospital gurney to "understand" the patient experience, can he really get the same level of fear, the same level of emotion and insight, knowing that he isn't really sick and can get up and walk away at any time? I am all for experiential learning, for wholeheartedly engaging in our research, but now I feel more humble and aware of the limits of my abilities.

Conducting this autoethnography also helped me understand more about the challenge of being a research participant, something we may think about only superficially. We ask participants to share (and clearly articulate) their most personal thoughts with us. We ask them to keep detailed diaries of small events. We ask them to stay engaged with the fieldwork as long as we need them to. Sometimes we forget (especially in these days of blogs, text messages, Facebook and camera phones) that capturing (and producing!) data is time-consuming. I think that now I'm much more attuned to the

⁵ In her pointed critique of autoethnography, Delamont objects to it because (among other things), "[i]t cannot fight familiarity... [i]t is experiential not analytic... [i]t abrogates our duty to go out and collect data... and 'we' are not interesting enough to write about..." She says that autoethnography is mostly "about anguish," and is both "literally and intellectually lazy" (Delamont, 2007).

actual “workload” we are placing on research participants when we ask them to participate in our studies.⁶

I also believe that engaging in autoethnographic work helps us expand, sharpen, and refine our research skills. Historically, in anthropological fieldwork the researcher entered an entirely new setting, where everything was unknown, and it required a very open mind and deep curiosity to figure out what “mattered.” Entering and studying a completely unfamiliar culture is quite different than conducting research in a familiar one. But the latter provides an excellent opportunity for us. Using ethnography to understand the familiar enables us to learn anew, to challenge our assumptions, and delve below the obvious cultural familiarities (Jordan, 2003). Doing autoethnographic work takes this one step further.

For Us Personally

Finally, I believe that doing autoethnographic research provides a way for us to grow personally as well. When I initially decided to do the autoethnography, I was approaching it solely as an experiment in “research thinking” and as a way to compare different research protocols. However, along the way it became quite clear to me that I was benefiting on a personal level too. My field notes became a way for me to document an important part of my life, and to record it for the future. I noted my hopes and dreams, my failures and successes. I was able to see personal growth as I mastered different processes and learned new things about how to be a mother. From this point of view, the autoethnography was unlike any other research I had conducted, and it will have significant value well after the “research” is done.

CONCLUSION

Ethnographic research is based on the concept of studying participants in order to draw out information and insights about the “other.” In this paper, I suggest that the use of autoethnography – that is, studying ourselves in a deep, meaningful way – leads to new and more nuanced insights.

Autoethnography can enrich our data and our analysis for a number of reasons. It enables us to gather data that are not easily accessible with typical research protocols. We can engage with the

⁶ For the autoethnography, I used a number of tools to collect data – a laptop with MSWord (for my diary and to transcribe audio files), a digital camera (for photos), a phone camera (for photos), and an audio recorder that happened to be an app on my phone (for recording audio data, for in-the-moment reflections, for in-the-moment analysis). Right now, diary and “self-ethnographic” studies frequently require the participants to capture both text and visual data, and to access a particular, usually proprietary password-protected website to answer questions or to upload photos. Other diary studies require the participants to send emails or text messages to a certain person or phone number. These logistical requirements become a barrier that participants need to overcome, and data quality and quantity can suffer as a result. Given the ubiquity of mobile phones and the rise in smart phone ownership, we may want to consider how the mobile phone can ease the data collection burden on participants at some point in the future. This is an interesting area for us to follow as researchers as technology and usage models evolve.

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subject matter over a longer time period, and are not required to stop getting information when the fieldwork is “done.” We naturally relate to the subject of an autoethnography, and can go both deeper and broader in our lines of inquiry than is normally possible. And autoethnography lends itself well to examination of one’s daily life and the social networks that shape it. For these reasons, autoethnography is a valuable research method for new product development. At the same time, we should recognize that autoethnography is a complement to, not a substitute for, other customer-centered research methods.

Autoethnography also has benefits for us as ethnographers. Engaging in autoethnographic research builds empathy for participants, and gives us some sense of what it’s like to be on the “other side” of the field guide. Autoethnography helps us better understand the “workload” we put on participants when we ask them to keep diaries or to produce other data. Doing autoethnographic research provides a way for us to grow personally too. Rather than trying to remove the self from our work – something that is difficult if not impossible – autoethnography lets us embrace the tenets of participant-observation and self-reflection. It expands our methods repertoire, and enables us to become even better practitioners of our research craft.

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Acknowledging Differences for Design: Tracing values and beliefs in photo use

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This paper explores links between ethnographic approaches, technology design and use and values and beliefs. We document recent empirical work on the use of photographs amongst Chinese families; pointing to some differences with previous empirical studies from predominantly Western cultures and tentatively linking Chinese photo work to rather broader cultural values that may develop some ‘sensitivities’ for design. For some time ethnography has been interested in ‘values’ in methodological approaches and concerns. The notion of ‘values’ is also repeatedly called upon in ethnographic studies of (technology for) the home. In this appeal these studies tellingly echo Peter Winch’s sentiments regarding how, in general, social life can be understood only through a understanding of beliefs. This paper documents and explicates photo work amongst Chinese families, linking the families’ own explanations and comments about these practices to much wider, if particular, sets of social and cultural values and reflects on the potential influence of these values on technology design.

“...both the ends sought and the means employed in human life, so far from generating forms of social activity, depend on their very being for these forms. A religious mystic, for instance, who says that his aim is union with God, can be understood only by someone who is acquainted with the religious tradition in the context of which this end is sought; a scientist who says that his aim is to split the atom can be understood only by someone who is familiar with modern physics.”
Winch, 2008:51

INTRODUCTION

This paper explores some of the links between ethnographic approaches, technology design and use and differing beliefs and values. In this sense it reflects on “Dō” as a sense of individual and communal mastery heritage and aesthetic and the importance of considering human values when conducting ethnography. We document some recent empirical work on the use of photographs amongst Chinese families; pointing to differences with previous design-oriented empirical studies from predominantly Western cultures and tentatively linking Chinese photo work to certain broader cultural values that we argue offer promise for developing some ‘sensitivities’ for design. For some time ethnography has been interested in ‘values’ in methodological approaches and concerns (Geertz, 1973). The notion of ‘values’ is also repeatedly called upon in ethnographic studies of (technology for) the home, from the earliest considerations of it as a target for new technologies. O’Brien et al. (1999) argue for the incorporation and accommodation of new technologies into existing household values because; “...householders incorporate domestic technologies into the complex set of routines, rights, and obligations constituted in and through the social organization of the household”. Crabtree et al. (2003:2008) suggest that the home forces

attention on different groups of users and that design for the home requires a sensitivity to broader concerns – or “*cultural values*” – and activities.

“The home offers new sets of challenges that move our understanding of interaction beyond the current focus on information and knowledge work. It exposes us to the demands of new user groups, including the elderly, the disabled and the mentally impaired [14, 5], and requires us to be sensitive to the impact of broader cultural values and the need to support activities other than work [7].”

Previous arguments more specific to the work we present here include Bell et al.’s (2000) use of an example of a school child’s performance at school reflecting filial piety to argue for deploying an understanding of the broader cultural context when trying to understand the role of technology in homes in China. A similar argument about the intrusion of ‘broad cultural values’ into technology use has been made about photo taking and display by Richard Chalfen (1987:47):

“Kodak culture appears to be designed and maintained by cultural and social prescriptions that remain in people’s minds and are guided by public sentiment...It will become clear that picture taking habits and picture showing habits are guided by unspoken and unrealized social conventions.” (ibid:47)

Chalfen’s (1987) suggestion here is that snapshot use in the home is ‘social’ and, in being so, involves particular practices, conforms to certain norms, is selective regarding its audience and produces ‘private’ forms of communication, particular to the home ‘community’. Chalfen (1987:139) also notes, in his discussion of ‘Kodak culture’, how the production and interpretation “camera-mediated life” involves placing an idealized notion of family on display:

“Kodak culture promotes the visual display of proper and expected behaviour, of participation in socially approved activities, according to culturally approved value schemes. People are shown in home mode imagery ‘doing it right’, conforming to social norms, achieving status and enjoying themselves, in part as a result of a life well-lived. In short, people demonstrate knowledge, capability, and competence to do things ‘right’. In these ways a sense of belonging and security is developed and maintained.”

These authors argue strongly for the importance of recognizing ‘broad cultural values’ when attempting to understand photograph use, a sentiment shared by Peter Winch (2008:51) in the quotation above. However, there is rather less on exactly how they see the connection between such ‘broad cultural values’ and design. This ‘gap’ will become increasingly evident as we present a review of design oriented photography studies below.

It would be hard, indeed foolish, to disagree with general arguments for ‘value-sensitive’ design (e.g. Friedman et al., 2002). However, the ‘values’ are variously described in the design-centred literature. Friedman et al. (2006:349) describe values as “what a person or group of people consider

important in life”¹ or “human values with ethical import” (Friedman et al., 2002). They also argue these ‘values’ are relevant to a given situation involving technology, evolve from “conceptual investigations” and list thirteen separate instances of such ‘values’ e.g. “human welfare”, “privacy”, “trust”, “autonomy”, “informed consent”, accountability”, “courtesy”, “identity”, “calmness”. They are quite clear that they take a ‘principled’ approach: “such values have moral epistemic standing independent of whether a particular person or group upholds such values” (Friedman and Kahn: 2003:1186). Cockton (2006), in a seemingly pragmatic move, embraces a wider notion of ‘values’, noting (*ibid*:168) that “things of value are *worthwhile*, or things of *worth*”. He distinguishes his Value-Centred design from Friedman and Kahn’s (2003) Value-Sensitive Design: “VCD has a more open genesis, starting with the *worthwhile*, that is, whatever some people somewhere value, individually or collectively, irrespective of ethics, wisdom, style, taste, etiquette or the approval of others.” Having shifted the focus of Value-Centred Design (VCD) from ‘value(s)’ to ‘worth’, he then pins worth on motivation(s): “The motivations of individuals and social grouping define what is worthwhile”.

However we are less than convinced by the assumption that we know exactly which ‘universal’ values apply, whether they can easily be distinguished from practice at all or exactly which should somehow find their way into design. Behind many of the studies of technology use in the home and specifically the use and ‘work’ of photo technologies, lies an assumption both that there are discernable cultural values at play (see below) and that these work their way into technology use in some fashion. There is rather less on documenting exactly what those values are and even more rarely anything on where these values might come from and on how they might be linked to ‘broad cultural values’. This is not to say that photo practices around the world do not exhibit family resemblances. However, there is a danger in taking similarities too far, for although “football, chess, patience and skipping are all games...it would be foolish to say that all these activities are part of one supergame, if only we were clever enough to learn how to play it” (Winch, 2008:18). Similarly there is a Brazilian style of football that is distinct from an English style and these styles are, at least to some degree, rooted in and affected by a particular culture and concerns about how football *should* be played.

This paper attempts to document and explicate photo work (Kirk et al., 2006) amongst Chinese families, linking the families’ own explanations and comments about these practices to much wider sets of social and cultural values. Our starting point is simple. Returning to the sentiment of early studies of domestic technology and Winch’s notes on social relations we describe ‘broad cultural values’ simply as ‘beliefs about what people should do’. In this working definition we suggest that ‘cultural’ denotes being specific to a particular people in a particular location. This notion of values is only a working definition to frame our description, a definition that will, in fact, be informed through the description we present. We stress two further important points. Firstly, we have not superimposed a notion of values on this setting. The importance of values emerged from our examination of the families’ practices and is therefore an integral part of the description we present here. Secondly, although our aim here is primarily pragmatic - to trace ‘values’ *in* design - we also wish to further inform the notion of ‘values’ *for* design through what we present.

¹ This definition is derived from the Oxford English Dictionary.

SOME KEY COMPARISONS

There has been a proliferation of (technology-centred) studies of photographs over the last ten years. We focus on two sets of studies that support the argument in this section that, although many may laud and acknowledge the importance of different ‘cultural values’ few actually study photograph use outside Europe and the USA and even fewer still attempt to illuminate or explore these ‘cultural values’. We reviewed fifteen technology-oriented studies of paper-based and/or digital photos taken from the Computer-Human Interaction (CHI) or Computer Supported Cooperative Work (CSCW) literature between 2000 and 2007, paying particular attention to the purpose, approach, length, participants and output of the studies². The review showed that almost all the studies that were explicit about the origin of their participants drew from people either in Europe or the USA except for Håkansson et al.’s (2006) study. Six studies did not describe the origin of their participants. The review also showed the propensity in these research communities to study individual people for relatively short periods of time: for 12 of the studies the single person was the focus of the analysis and only five studies exceeded one month in length. Most studies married examining and describing situated photo practices with proposals for technology (re)design, while Patel et al. (2005) and Cui et al. (2007) examined ‘performance’ through experimental approaches. Eleven studies achieved this through some form of fieldwork – interviews, observation etc. – or trial of a particular technology in the field. Five of the studies logged behaviour in some way other than through observation (e.g. data logging, a diary). Only two studies used laboratory experiments, and only one each used a critical literature review and prototyping. Thus many studies were “quick and dirty” (Hughes et al., 1994) and deployed to support practical, design-oriented outcomes. Harper et al., (2007) and Sellen et al. (2007) both used self-photography while Crabtree et al. (2004), Kirk et al. (2006) and Taylor et al (2007) were closest to the general approach we adopted in our own study.

A general preoccupation across the studies was ‘photowork’ with some discussion of design, whether that was design implications for photo technologies (e.g. Frohlich et al., 2002), the proposal of a design concept (e.g. Håkansson et al., 2006) or the evaluation of an existing design (e.g. Rodden et al., 2003). More ‘theoretical’ concerns included appropriation and visual communication (Voida & Mynatt, 2005) and memory (Harper et al., 2007; Sellen et al., 2007). Of all the papers, the findings presented in Miller and Edwards (2007) and Taylor et al. (2007), with their attention to privacy and obligatory concerns respectively, were the only papers with any clear focus on participant beliefs and values. In Miller and Edwards’ (2007) case they addressed the impact of different ideas about privacy on photo sharing practices among two different generations of photo use ‘cultures’ studied – “Kodak Culture” and “Snaps”. Taylor et al. (2007) consider the role of particular family obligations in choosing which photographs to put on display in the home.

In contrast we found four studies from the (visual) anthropological literature (Chalfen, 1996; Chalfen, 1997; Harris, 2004; Chalfen & Murni, 2004) centred on social and cultural issues, including people’s belief systems and society-specific observations. Each study not only examined photograph

² Leichti and Ichikawa, 2000; Makälä et al., 2000; Frohlich et al., 2002; Rodden and Wood, 2003; Crabtree et al., 2004; Ljungblad et al., 2004; Patel et al., 2005; Voida and Mynatt, 2005; Cui et al., 2007; Håkansson et al., 2006; Harper et al., 2007; Kirk et al., 2006; Miller and Edwards., 2007; Sellen et al., 2007; Taylor et al., 2007

use in detail and the (social) role photographs play in particular societies but also, more broadly, considered the *relationship* between photographs and the particular people focused on, leveraging the findings to provide insights into particular people's culture, including beliefs and values. These insights simply unraveled in the description. This may not appear a fair comparison; after all the former set of papers focuses on the practical enterprise of design while the latter focuses on describing and understanding photographic practices. However, since we are arguing for the importance of considering how 'broad cultural values' are deployed for different purposes we believe it is appropriate.

The suggestion then is that, in the need to inform design through often 'rapid' studies, the obvious "limits" and "circumstantiality" (Geertz, 2000) of the proposed designs have been left behind in the technology-oriented studies. We see a distinct recognition of the particular location and people when examining photograph(y) use in these studies yet acknowledgement of the potentially enormous range of practices and values in photograph use seems to have got lost somewhere in moving forwards to design. Perhaps because of the familiarity and similarity of these practices the importance of their differences has been forgotten. Keeping such variations and differences in mind through the design process is challenging. Our suggestion is that the notion of '(cultural) values' can serve as a reminder to be carried through the design process.

APPROACH

Over an extended period (between 18 months and 1 year) between 2007 and 2008 we studied five households in Chengdu city in China (Table 1). We recruited households subject to their availability, interest, willingness to be involved and use of both digital and 'traditional' photography. The households varied in terms of composition and life stage. The informant in Household 1 was widowed, while Households 3, 4 and 5 were all married couples with no children at home. Household 2 comprised a couple and their teenage daughter. The informants in Household 1 and 3 were retired while the members of all the other households, bar the teenage girl, worked full or part-time. Each household had one main informant (Informant x ; x is the household number), although other members of Households 2, 3 and 5 participated. The main informants in Households 1, 2, 4 and 5 were all keen amateur photographers. All households knew at least one other household.

Our engagement with these households was through techniques inspired by "Cultural Probes" (Gaver et al., 1999) - deliberately constructed collections of materials and strategies used to explore and discover more about people's lives – along with ethnographic interview and observation. The Probes had properties of "space probes returning data over time from far away" (Gaver, personal communication) and "medical probes poking into intimate nooks and crannies" (*ibid*). This approach has parallels with anthropological studies of peoples where media are produced by (e.g. Hopi artist Victor Maseyesva among others) or with (e.g. Turner, 1992) and for local people. This approach also resonates with photo-elicitation approaches (e.g. Harper, 2002; Latham, 2003) where photographs, captured by either the researcher or informant, are deployed during interviews. Here participants responded to a series of open, under-specified instructions in a pack with a journal, digital camera and various stationery (e.g. pens, PostIts) asking them to take photographs and describe the role of photographs in their lives.

Household	1	2	3	4	5
No. in home	1	3	2	2	2
Linked to	2, 3, 4, 5	1, 5	1	1	1,2
Age	65+	40+	70+	30+	40+
Gender	Female	Female	Female	Male	Male
Language	Mandarin, dialect	Mandarin, dialect, English	Mandarin, dialect	Mandarin, dialect, English	Mandarin, dialect, English
Religion	Buddhist	None	None	None	None
Time involved	Apr 07 - Oct 08	Apr 07 - Oct 08	Oct 07 - Oct 08	Oct 07 - Oct 08	Oct 07 - Oct 08

TABLE 1: Overview of the five Chinese households involved in the study

Thus we progressively explored and uncovered households' photo practices through Probes and interviews. We also asked each household to provide a 'photo tour' of their homes, pointing out and explaining photographs and how they used them. Each household delivered a journal with photographs pasted in and some textual description, a video-recorded ethnographic-style interview centred on their journal and a video-recorded home tour. This process involved, as we moved from one household to the next, at times revisiting and revising our findings. We interacted with Households 1, 3 and 5 through a translator (thus some quotations are in the third person) who knew the members of Households 1, 2 and 4 prior to the study and helped recruit them. We discussed our findings with the translator and Informant 5 periodically through the study and presented them with an earlier version of this paper for comment. Informant 5 provided particularly useful insights regarding Chinese values and beliefs through two in-depth interviews centred on our findings. Thus the three findings we present below emerged from an iterative and consultative process involving the informants, a key informant, a translator and us.

**FIGURE 1: Probe 'pack' (left) and the first page of Informant 2's 'return'**

THREE FINDINGS

All five households had readily appropriated aspects of photography that supporting showing, pointing to and handling photos with others present, giving them to and/or receiving them from others, collecting them and putting them in a particular place in the home, as well formally classifying and organizing them according to particular criteria. However there was more evidence of sharing and transferring via paper than digital means across the five households – all households preferred to give

photographic prints to others for example. All households stored and archived photographs both via digital and non-digital means. These collections had different uses across households. There was evidence that Informant 1, 2 and 4 printed only what they considered the best photographs while storing and archiving more digitally. The connection between Household 3's digital and paper collection was weak – most of this participants' photos were in paper-based albums and did not have a digital equivalent. Household 4 did not have any paper photos in their home, albums or otherwise but stored and archived their photos digitally. Only Informant 3 did not take photos digitally or otherwise – the other 4 households used digital capture exclusively. Informant 3's participant simply collected, collated, and carefully stored photos

Table 2 below presents what the photos depicted in the five households' Probe returns. Each photograph in each return could inhabit a maximum of two categories. Thus the sum of the individual category numbers in the table exceeds the total number of photos (Photos (no)). *People* refers to individual family members living or dead (not necessarily personally known to the informant), *Vistas* to places, buildings, nature shots etc., *Events* to occasions of personal importance such as visits by relatives, attendance at events, and *Objects* to material artifacts – photo albums, cameras, computer monitors, a pram, calligraphy brushes etc.

Household	1	2	3	4	5
Photos (no)	33	32	8	68	30
People	13	5	8	12	20
Vistas	6	11	0	51	15
Events	11	5	3	2	4
Objects	20	16	0	11	1

TABLE 2: Overview of the five Chinese households involved in the study

The frequency of the category *People* consistently ranked highly across all five households. *Objects* ranked most highly for Households 1 and 2 probably because we stressed the need to photograph photo equipment and technologies (although we gave identical written instructions to all households). Household 3, 4 and 5's returns were much more 'freeform' and, among these, Households 4 and 5 included a very high number of *Vista*-type photos. A general comment about each of the returns is that both Household 1 and 2, while including many 'functional' photos (e.g. of different cameras) also lapsed into 'family snapshot' and 'landscape' style photos in about a third and a half of their included photos respectively. All of Household 3's photos were either 'family snapshot' or 'social gathering' style photos, although the participant did include a newspaper clipping and a brochure of a relevant photo exhibition. Household 4 and 5's photos were the least 'personal' and the most 'documentary'-style in content. These returns included few family snapshots and many more pictures of urban life although among the 'Vista'-type photos the participant in Household 4 included 19 'pure' nature-type vistas (e.g. flowers) and the participant in Household 5 included six such photos.

In what follows, our aim is not to overstate and exaggerate differences between what we have observed in China with other 'non-Chinese' studies – indeed this would not be a fair description of what we have observed. Instead we wish to present specific findings from the households that both resembled practices in non-Chinese families - in Silverstone et al's (1992) terms, a particular

appropriation, objectification, incorporation and, to some extent conversion of photo technologies. We describe three practices that we believe both inform the notion of ‘cultural values’ and, through this informing, provide some support for design.

The public and private display of family photographs

The apparent regularity and significance of family visits to households and the integral involvement of photographs in these visits suggested that participants attached particular importance to the sharing of photographs. “*Okay, when she has new pictures, um, if she receives new pictures or if she has new pictures she normally, it’s normal, she normally will show her family members when they come to visit her*” (Participant 1). Indeed, Participant 3 and 5 willingly produced paper photo albums and started talking about them in detail during the first visit to their homes. Participant 4 also shared digital photos and talked about them upon first visiting his home. Participant 2 and 4 suggested that this sharing also extended outside the home: “*She also, apart from sharing with family members, she also shares these pictures with her friends and she, she will talk about, uh, what they currently doing and, you know, things like that.*” (Participant 2)

“Sometimes he gets together with other people, those people he hasn’t seen for a while and they don’t meet often so he takes picture of these people and he will give to these, give the pictures to these people...um, he will give as many as there are.” (Participant 4)



FIGURE 2: Informant 2's semi-public photographs upstairs (left) and Informant 3's private photographs in the bedroom (right)

However, there was also certain etiquette governing the display and exchange of photos with regard to privacy and obligation. Four of the five households did not display personal family photos in ‘public’ spaces (Household 4 did not have any photos on display anywhere in the home) – only Household 1 displayed family photos in ‘public’ areas in the home. Households 2 and 5 had photographs of the household’s members in areas of the home outside the bedroom: Informant 2 had five framed photographs of herself and her daughter in an area of her home for close friends only (Figure 2 (left)); Participant 5 had three small photos of himself and his wife opposite the front door. However these were not private or intimate photographs as with family photographs placed in bedroom (Figure 2 (right)): they did not feature affectionate poses and did not even include household members together in a photograph. These ‘public’ pictures were casual individual portraits bar one in

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Household 2 that included Informant 2 and her daughter. In this latter picture Informant 2's face was not fully visible.

Participant 2 noted the following with regard to her household's 'private' photo frames: "*And, uh, these pictures are, eh, the pictures she and her husband together and that's why they would put the pictures in their private rooms – so it, this is privacy.*" When explaining the difference between other photos in her home (e.g. Figure 2 (left)) and these photo frames she also noted:

"And, uh, this, this place is actually for everybody, it's actually a public place. So she puts pictures that people can share, so that everyone can share. And this one, because it's privacy, private room, so, uh, only the pictures of, uh, she and her husband will appear. So the pictures normally are romantic and private."

Participant 5 described how the bedroom was the only private space in a Chinese home. "*We have a different understanding of privacy. For Chinese maybe I don't know where is the private space...only bedroom maybe.*" He elaborated concerning his opinion on Chinese notions of privacy with regard to the public display of photographs in the home:

"...for Chinese people, they've got a different understanding with, um, photos. For them, maybe take some photos, is just leave some good memories of Life so, um, so perhaps they think all these things they see from the photos are private they don't want to show it to anybody."

The capturing and viewing of nature photographs

The frequency of 'Vista'-type photos and, in particular nature shots (see Table 2 above), among households' Probe returns and the interviews we conducted with them indicated to us that, for these households at least, these photos had particular significance. When asked about what she used these 'Nature' photos for, Informant 1 replied:

"Because she likes Nature, so she likes take photos of flowers and nature views and she feels very comfortable and she, when she takes photos of these nature features she feels very comfortable, very happy, it, it seems that, um, she feels like she is in arms of the Nature and when, when she comes back with the photos she normally appreciate them by herself if her friends are not there but when the friends are with her she will share the photos with them as well."

Participant 2 noted: "*She, she especially like flow, likes flowers and she has a special album for flowers...different seasons suits different flowers so every, every year during the special season for the flowers, for different flowers she will go out to take pictures of flowers.*" Thus there was a sense of marking particular seasons though these photographs. Informant 2, when asked about why she took photographs of her roof garden, noted: "*Um, uh, she does take pictures of her own garden because the garden change, is very changeable – she likes gardening too so she li, likes to record the change of the garden.*"

However this appreciation of Nature photographs was not entirely singular. Two of the families actually shared and discussed Nature photographs. Informant 5 noted the following with regard to Figure 3 (left) below: “*And also sometimes if you think, like this, something, something like this [pointing to a picture of a flower], if I like it or maybe I will sent it to my friends to share [indistinct] with my friends...email or use the QQ.*” This informant also described going on excursions to the countryside to take Nature photographs. He noted with regard to the photograph in Figure 3 (right): “*I went to Dongla Mountain to see the red leaves. I kept the scenery and I kept my memory which I will share with my friends.*”



FIGURE 3: Informant 5 pointing to a photograph of a lotus flower in a photo album (left) and a treescape photograph taken during an excursion (right)



FIGURE 4: Informant 1’s landscape photograph of the rapeseed flower in Spring (left) and Informant 4’s close up flower photograph (right)

Informant 4, in a comment next to the photograph in Figure 4 (left), noted the importance of taking photographs during Spring - the season of a very important Chinese festival: “*It’s Spring again. We went to the countryside to appreciate Spring scenery! I always take lots of pictures of Spring flowers.*” This informant wrote next to a photograph of Jiu Zhai Gou, a place famous for its beauty: “*The Heaven in the Human World*”. These landscape photographs marked a distinct kind of Nature photograph, as did close-up flower photographs (Figure 4 (right)).

From the data above it seems that these Nature photographs supported remembering and marking the seasons for these Informants. However Informant 5 also noted the importance of visiting a particular place for Chinese: “*Chinese, they’ve got a tradition of visiting the place, the nice place. This is part of the Chinese culture...If you see more, the flowers, the mountains, the beautiful things your heart could be much more pure.*”

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Informant 1 above also suggested that Nature photographs gave her comfort. For Informant 5 these photographs evoked positive feelings:

"Because Nature is the most beautiful thing in the world is the natural things, flower things, trees, mountains so they want to keep the memory of that or they want to keep the beautiful things in their mind...it's not just in their mind but also in, on the paper, anytime if they want to, if they want to think about this...they can just take a look..."

The viewing of particular family photographs

From Table 2 it seems that among the older informants the 'People' category of photograph was more common. However, if we consider a photograph of a photograph of a family member to qualify for the 'People' category, against the 'Object' category, 15 of Informant 2's 32 photos in her return depicted family members. In contrast, only four of Informant 4's 68 photos and none of Informant 5's photos included family members, despite both including people in many photos. A notable difference between Household 2 and Household 4 and 5 is that there are two children in Household 2, one who lives there.

As we have already noted, it was unusual for these Chinese families to display personal family photographs in public areas in the home. However, Informant 1 displayed photos of her family on a family 'photo wall' (Figure 5 (left)). When asked about this she noted:

I put on these pictures according to three considerations. First I have already recovered from the death of my husband therefore I want to look at him every day and therefore I centralise my husband and chose the meaningful photos during our life around him. Secondly my grandson [grandson's name] was about to go to Vancouver with his Mum and my husband was very fond of [grandson's name] and thought he was very important so in order to let [grandson's name] remember his grandfather forever and also realise grandfather's expectation of him so I chose lots of pictures of [grandson's name] and grandfather together. Thirdly my granddaughter [granddaughter's name]'s birth brought the whole family a lot of joy. In order to introduce her to everybody I chose some pictures from [granddaughter's name]'s birth until she was 2 years old to put on the wall.



FIGURE 5: Informant 1's 'photo wall' (left) and her son looking at an introduced digital photo frame (right)

This informant also loaded photos of her grandson (e.g. Figure 5 (right)) on a digital photo frame that we gave her so that her son (the boy's father) could see them when he visited. Her grandson was currently studying in Canada. She placed the photo frame next to the front door to facilitate ease of viewing. When asked about this she commented:

"[Grandson's name] always emails Informant 1 his pictures and [son's name] doesn't have any time to look at his son's photos because he doesn't use email so Informant 1 puts all his photos into the photo frame for [son's name] to look at. And he hasn't had time to look enough of this so he brought this photo frame into his office to continue to look."

Informant 3 was diligent in meticulously collecting and collating photos in albums. Figure 6 below depicts black and white photographs from one of Informant 3's photo albums. Informant 3 told the following story while talking about Figure 6 (left):

"This is also me [pointing to the little girl in the middle]. This is her house [pointing to the girl on the left]. She is American...Both of them were my friends, my childhood friends. Her father [pointing to the girl on the left] met my elder brother in America so her father gave him this picture to bring back to China. The photo travelled from far away. It traveled all around the world."



FIGURE 6: Informant 3's photo of herself in her childhood with an American family friend (left) and studio photograph's of, clockwise from left, her husband's parents, mother with him and grandmother with him (right)

On a separate occasion she described the photographs in Figure 6 (right): identifying people in them and the occasion of the photograph. For example, when describing the central photograph in Figure 6 (right) Informant 3's husband noted: "*This is my mother...One month old. It's a probably a picture to celebrate [me] being one month old.*" While describing the photographs in Figure 6 (right) we passed photographs from one person to the other. This both supported turn-taking (e.g. an indication that the translator should listen and the solicit more information through questions) and moving onto another topic of conversation (e.g. from Informant 3's one month birthday to his parents).

DISCUSSION

What we have tried to do here is, through the informants' own words, describe the order and 'sense' in their photographic practices. The account and argument we have presented is not only supported by multiple forms of evidence - photographs by informants and us, journal entries by informants, informant descriptions of their homes and in-depth ethnographic interviews - but has also been jointly constructed. Through the Probes informants could uncover and reveal their 'culture' to us and put it on display for us. What we present here was enquired into and 'discovered' by them as much as by us. At the very least what we have documented here is "in terms of concepts which are familiar to the agent as well as the observer" (Winch, 2008:45). Thus our interest has been in what people do and in taking seriously what people actually say about what they do, recognizing, of course, that these are just 'versions'. Now we wish to consider the 'broad cultural values' within these findings and the role they might play in informing design.

We pointed out above that there is little in the way of comparative work examining photograph(y) practices. On the other hand, in the rush to contrast and politicize "Asian" against "Western" (or particularly "American") values in the 1990's there was often scant attention paid to what ordinary people actually do and how these supposed values really play out in the course of mundane behaviour. Looking at the detail we see similarities and differences not polarities concerning what these households feel they 'should' do with photographs. In simple terms these families think they should not display intimate family photographs publicly while they feel they should capture and view beautiful photographs and remember family members through photographs. These broad cultural values, or 'code' to which we refer may have their roots in various religious beliefs and concepts; and whilst we are all too aware of the dangers of attempts to effectively 'pick and mix' in the sweetshop of religious ideas, these ideas require some small exposition. There are over 100 million followers of various religious faiths in China including Buddhists, Muslims, Christians and Daoists. Confucian ideas, or more generally a "Chinese value system" (Yin, 2003) arguably infuse society (Yang, 1967). The fusion of various formal religions and folk beliefs in China is often referred to as "popular religion" or "...a common underlying set of beliefs and practices... the specific strands of canonical Chinese religion: Confucianism, Daoism and Buddhism" (Adler, 2002:105). Even after the importing of Western ideas, particularly Communism, some claim Confucianism continues to hold sway in China: "Confucianism continues to deeply influence every Chinese, whether he likes it or not, for it is an essential ingredient of the culture that has made him what he is" Creel (1953:242). Similarly, Creel (1953:114) claims that Daoism forms an essential part of "the Chinese spirit": "The Taoist emphasis on man's oneness with nature has inspired Chinese art and has given the Chinese people much of the poise that has allowed their culture to endure."

These different religious beliefs and philosophies, particularly in a society of "diffused religion" (Yang, 1967)³, also remind us that the notion of values is something *distinct to a particular group* that people *carry out* in their everyday lives through photographic practices involving technology. They also

³ An important distinction is between what Yang (1967) terms "institutional" and "diffused religion". The former is "religion that is practiced in social institutions that are specifically and uniquely religious" whereas the latter is "practiced in "secular" social settings such as the family, the community and the state" (Adler, 2002:105).

remind us of the subtly different ways in which they are carried into and relate to practice. However, we cannot presuppose what these rules might be and how they might play out in particular contexts, although we may have some idea what they might be or else how might we ever understand them? Both the Chinese households we have described and the Western households described in the literature review (e.g. Taylor et al. 2007) behave according to obligations, and yet these obligations have subtle differences in the way(s) they play out in practice. Thus, as Orlikowski (2000:421) suggests such ‘rules’ are “enacted by the recurrent social practices of a community of users”. Thus our gripe with some of the studies reviewed is less their focus on ‘Western’ photo practices alone than the failure to acknowledge the limits of the particular aspects of the designs they promote through their work i.e. that all designs may not work for all people.

We took the stand that values are ‘beliefs about what people should do’ at the beginning of this paper and suggested a need to consider ‘broad cultural values’ in design. This definition couples values and behaviour – values are not somehow ‘held’ but are ‘done’. A further progression in this approach is to view our families’ orientation to particular religious notions as they talk about their photo practices along the lines of Wieder’s (1974) account of “telling the code”. In this view the “code” is used as displays, or “accounts” of actions. In layperson’s terms we can understand it as ‘the way we do things around here’ although that ‘way’ may not be explicated in isolation from practice by those following (despite being recognizable). In this view when a household talks about Nature or family relations and obligations it is not simply reciting some set of religious rules but sharing, defining and performing joint actions, accounting for their actions in terms of conformity to the code as a “method of moral persuasion and justification”. As such it is used as displays or accounts of what those actions ‘obviously’ are. As Heritage (1984) argues, this analysis:

“vividly demonstrates that where sociological research encounters institutional domains in which values, rules or maxims of conduct are overtly invoked, the identification of these latter will not provide an explanatory terminus for the investigation. Rather their identification will constitute the first step of a study directed at discovering how they are perceivedly exemplified, used, appealed to and contested.”

In Confucianism a key concept in a ‘good society’ is ‘ritual’ or practices – “all those “objective” prescriptions of behaviour, whether involving rites, ceremony, manners, or general deportment, that bind human beings and the spirits together in networks of interacting roles within the family, within human society, and with the numinous world beyond” (Schwartz, 1985:67). This is a concern with moral behaviour not just the details of ritual. Similarly, we suggest that the way family photographs are made public (or not) in the home are indications of what these families consider to be *good, polite practice* involving certain “rules of propriety” (Creel, 1953:29) regarding their display and sharing for particular audiences. As Informant 5 noted:

“The character of Chinese is...one side of that is to uh...they like to share everything they hide with people if, if they trust this one, the people. So, most time we like to share all the things with our friends.”

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We also suggest that Daoism, with its emphasis on communion with Nature and quietness, may help us understand this practice of capturing and reviewing Nature photographs in this particular context. As Informant 5 noted:

“So if you can do something make yourself close to the Nature or being in part of that Natures it's a very meaningful things for, for Chinese. So when you take some photos you can feel you are very close to Nature or part of the Nature...It's connected the human being and the natural world...and the photos is like a bridge: you can just cross the bridge to get to the, be part of the Nature.”

Likewise notions of ancestor veneration and filial piety, seem helpful: indeed, Informant 1, a widow, defied cultural conventions in order to display photographs of her husband in her home. Any ancestor veneration seemed much closer to simply remembering particular deceased people important to the family in the course of everyday life – in the case of Household 1, Participant 1's husband through the display of photographs and, in the case of Household 3, Participant 3's husband's parents circulating and talking about photographs. Within those practices - how photographs framed family relationships particularly through ordering - important family relationships became evident.

It is also important to note that any such ‘values’ are tied to practices and that as these practices may vary so may the values. This is a recognition that is particularly important in cross-cultural contexts. In this case perhaps ‘broad’ is the wrong term – although these ‘values’ are recognised as having impact on people’s lives (e.g. filial piety), they are most specific and ‘local’ to the informants we describe here. This is not to embrace moral skepticism but to state that these ‘values’ are dependent on particular practices, like language is dependent on social interaction:

“The impression given is that there is language (with words having a meaning, statements capable of being true or false) and then, this being given, it comes to enter into human relationships and to be modified by the particular human relationships into which it does so enter. What is missed is that those very categories of meaning, etc. are *logically* dependent for their sense on social interaction.” (Winch, 2008:42)

Yet design-centred listings of ‘values’ seems to be particularly centred on ‘the West’ - ‘autonomy’, ‘identity’ etc. - or have ‘Western’ versions of these ‘values’ e.g. privacy as an individual right. We have to be careful here because, as with the sharing and display of photographs, across different settings the notion of ‘should’ may both be differently expressed in practices and accounts of those practices. Being too quick to embrace universals without acknowledging the context-specific differences or, in Weider’s terms ‘the code’, may make us equate e.g. notions of family obligation over the display of photographs in ‘Western’ homes with the subtly different obligations regarding the production and circulation of photographic prints for those depicted in photographs for the families here.

Other work has established the existence of photo management practices in the home (Kirk et al., 2006). With the families we have examined, such management practices certainly exist and as contributing to the accomplishment of family life that we believe “photowork” (*ibid*) sustains. The findings here suggest that the practices around photography reinforce important rituals in family life,

connect with Nature and preserve the family involving both those who are alive and dead. In this account family is less being represented or simulated through photographs than being held together because of a photograph's materiality. The materiality of paper-based photos means co-presence is an important determinant of being shared. Thus the photograph in these households supports a series of practices that are integral to family life. This seems an important observation when developing new designs.

These findings are also significant for they remind us how values can become subtly yet permanently ingrained into designs. Cognizance of values act as a reminder, a check concerning what we are propagating through particular designs. We suggest that our study also shows that in homes in the future there may be a role for sharing photos digitally, over a distance synchronously, particularly with distributed families. There are design challenges for such technologies' support for 'photo-talk', as Crabtree et al (2004) point out, but also opportunities for technologies that carefully and ingeniously support subtle variations in photographic practices. We suggest that minimal technologies that are 'open' enough to be tamed and transformed within the context of the home are appropriate to support photos in family life in the kinds of households we describe here. Based on what we have described other potentially important features would be: being aware of others viewing and sharing photos; appropriate security regarding publishing and sharing; 'stitching' of landscape photos, magnification of photos of flowers and; access to genealogies through photos.

CONCLUSION

What we have argued here is that in examining and designing for photo practices in Chinese households it is important to consider certain important enduring values at play – values about what one should do in order to be 'polite', values about what the value of beauty in Nature is considered to be and values about family and family members. We do not want to glibly push the argument that these practices represent "Asian values" that contrast strongly with what we have observed both in the literature and in our own studies in 'Western' homes. Instead, through documenting particular trajectories of use and considering photography as an evolving practice (Shove et al., 2007), we document ways in which practices around photography are grounded in sets of broad cultural values. In this regard, through considering photograph use in the light of Chinese thought and religion we have argued there are subtle but important differences between photography in the West and photography in China.

This study has also represented a genuine (and, we think, rare) foray into understanding photo practices and broader cultural values in Chinese households. We readily acknowledge that our findings have particular limits and circumstantiality; after all the families represent a total of ten people in a country with a population of over 1.3 billion. However the work presented here contributes to a growing corpus of studies, a corpus that documents both similarities and differences in "photowork" (Kirk et al., 2006), providing confirmation of a range of practices already documented, such as family obligations and their realization through the sharing and display of photos (Chalfen, 1987). We also provide important detail of the specifics of how these activities are accomplished or mutually achieved. So while a number of writers have commented on the idea that family photos might be regarded as essential in turning a 'house into a home' in delineating the public and the private space (Rose, 2003);

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precisely and exactly how this is done, achieved or accomplished varies according to the particular characteristics of the setting. It is precisely these characteristics that we are simply attempting to understand and appreciate through documenting a range of practices that suggests that all family photos and photo collections are not the same.

By seriously recognizing differences, as well as similarities and acknowledging the close coupling between practices and values, the chance of us imposing designs on others that are not ‘value-sensitive’ is reduced. What we have pointed to in this paper is the importance of recognizing particular values related to technology use through detailed examination of informants’ lives, as opposed to ‘top down’ approaches. Ethnography as a method is ideally equipped to achieve this but we have also pointed to the role of other approaches involving ‘Probes’ and self-photography. We have also argued for coupling ethnographic-type investigations with the question: ‘What are these informants beliefs about what people should do?’ Although these answers may not be radically vary, we suggest the importance of acknowledging differences. For us, the answer to this question was itself informed by investigations into Chinese religious beliefs – beliefs that served to remind us of the differences we were working with – identified as relevant. We suggest there is utility in carrying forward and referring to such answers throughout the design process.

NOTES

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“Ethnography of Ethnographers” and Qualitative Meta-Analysis for Business

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The use of meta-analytic studies has grown steadily in recent decades as a means of establishing greater confidence and robustness of social science findings, but such approaches remain rare in the business world. This paper offers two inter-linked qualitative meta-analytic approaches for business: one that both draws on pre-existing data to gain insight into new strategic questions and reaches across multiple studies to achieve greater generalizability and robustness, and a second that studies researchers and research practice as a means of reflecting on and improving methodology in particular organizations or research groups. Drawing on an in-house study the authors conducted for a Fortune 500 corporation, this paper articulates these two approaches and points to potential dangers and opportunities in applying them in other settings. In a moment in which researchers are increasingly called upon to do more with less, our approach provides flexibility and adaptability to environments inhospitable to marshalling resources to new original research.

INTRODUCTION: MASTERY OF THE PAST TO INFORM THE PRESENT

Ethnography and ethnographic mastery are generally assumed to require original research: new fieldwork and an influx of new data. This paper suggests that mastery might profitably include reflection on and analysis of past work, not in the form of literature reviews but as a basis for generating new and actionable insights. We offer a reflection on the potential, and potential pitfalls, of meta-analytical approaches to past projects, taking as a point of departure our effort to consolidate data from more than ten previous research projects conducted over a six-year period by the research division of a Fortune 500 company. The meta-analytic method we adopted was triple-pronged: 1) analysis across multiple projects aimed at generating insights with a greater degree of empirical support; 2) re-analysis of data based on new questions outside of the original projects’ scope; 3) what we call an *ethnography of ethnographers*, which can facilitate higher order reflection on ethnographic practice in the company and in the field more generally.

The reuse and reevaluation of past work is a key element of every research field. In the social sciences, literature reviews are a typical form of demonstrating knowledge of prior art, the researcher’s own skills, and the novelty of the direction presented by the author (cf. Hart 1998). Ethnographers in industry have long moved beyond the use of published literature. This stems in part from a relative lack of pertinent published studies compared to academic peers, as well as the need to produce research tailored to the demands of providing actionable results for clients and senior management. In past years, essays published in EPIC proceedings have taken advantage of data from earlier studies produced in the authors’ companies to develop a richer understanding of phenomena under

observation (e.g., Asokan [2008] on privacy in shared spaces in India; Cefkin [2007] on expressions and performance in everyday work routines). Taking up the use of past work a bit further, Churchill and Elliott (2009) have underlined the importance of managing, storing, and “curating” data over time so that it can be useful in the future.

In contrast to both literature reviews and typical mining of past projects, the approach we discuss here is meant to reach across multiple projects and data sets simultaneously, against the grain of the intent of the original researchers. What we suggest is not simply a review of the final output of past studies (the final report, the published study), nor is it simply a re-purposing of data. It is a new look at what data might offer when new guiding questions are driving the research team, particularly more general and open-ended ones. Clearly, attention to data curating and archiving can facilitate such an approach, but it is not a prerequisite.

Meta-analyses are commonly associated with quantitative research. Glass introduced the term *meta-analysis* in 1976 to indicate an approach for developing statistically sound conclusions achieved by combining and analyzing the results of large numbers of individual studies that treat similar research questions. Since that time, meta-studies have gained steadily in popularity for two main reasons. First, they are a response to the expansion of literatures in many fields to such a degree that it is practically impossible for a single researcher or team to comprehend or evaluate their content and significance (Darity: 2008). Second, in a climate in which statistical reliability has become increasingly paramount, meta-analyses are assumed to be more generalizable and statistically sound than single studies. As a result, meta-studies are now employed for a wide range of applications. In health care research, for instance, the approach has emerged as a means of testing with greater confidence the impact of different interventions. In the policy world, meta-studies are used to make a strong case for favoring one policy over another.

But meta-studies are rarely used in business. They are generally neither appreciated as a standard method or tool, nor considered as contributors to more reflective methodology. As Sam Ladner put it recently on the anthrodesign discussion forum: anthrodesigners are strong on *method* and weak on *methodology* (<http://tech.groups.yahoo.com/group/anthrodesign>, April 6, 2010). That is, existing tools are strong for the purposes they are put to, but there is relatively little reflection on their underlying rationale, philosophical assumptions, or link to questions of validity or proof. Whatever one’s views on anthrodesign research practice, in describing and reflecting on meta-analytical approaches and their possible applications, we aim to contribute to what we hope will be a growing conversation on methodology.

The approach we offer is qualitative, not quantitative. The difference between these two approaches mostly depends on the particular understanding at play of the difference between qualitative and quantitative research. In their seminal article on *meta-ethnography*, Noblitt and Hare rather dismissively wrote that “[a]ny similarity [between qualitative and quantitative approaches] lies only in a shared interest in synthesizing empirical studies” (1988:10). But the contrast here may be exaggerated. Both types of meta-analysis entail: 1) higher order analysis than found in individual studies; 2) potentially more robust or statistically sound conclusions than smaller studies; 3) possible mining of data sets for different questions (though, once again, quantitative approaches usually analyze studies on

the *same* question). The key difference between the two approaches turns on the nature of the material under analysis and the role the analyst plays in treating that material. A qualitative meta-analysis, like any qualitative analysis, is an interpretive exercise: in this case, an interpretation of interpretations. It may take up ethnographic material, published articles, or some other manner of comparative analysis, synthesis, or “translation” of individual studies. As with other interpretive approaches, the role of the analyst is crucial, but in interpretive meta-studies it may be even more crucial—and at the same time, under-appreciated. Indeed, as we discuss below, there is a danger that the aura of greater robustness associated with meta-studies might lead audiences to discount possible analyst bias.

To give a sense of what qualitative meta-analysis might look like in a business setting, the next section (II) describes the initial context in which we developed a meta-analytical approach and the specific project we completed, including the basic steps required (III). The project stimulated a reflection on methodology and what we see as a new tool, a twist on qualitative meta-analysis that we call *ethnography of ethnographers* (i.e. meta-study of researchers and research practice), which can be deployed for auditing and improving research practices in particular organizations, projects, or teams (section IV). These two approaches carry some cautions as well as significant possibilities for application, which we discuss in sections V and VI.

WHAT IT MEANS TO BE A SMALL BUSINESS (OR WHY WE NEEDED A META-ANALYSIS)

As a full-time employee and a consultant for the research division of Pitney Bowes (PBI), we were tasked with bringing together the division’s collective knowledge of small businesses in order to help inform broader corporate strategy. While the company’s primary marketing focus had been on larger businesses and enterprise customers, Pitney Bowes produces postage meters designed for small businesses and, at the time of writing, had over 800,000 small business customers using those products. The business units saw potential in this large base of small business customers, were motivated to provide them with solutions beyond postages meters, and, at the time of our engagement, were actively developing a strategy for this market.

In the preceding six years the research group had conducted 10 research initiatives involving small businesses. These were based on interviews, site visits, and focus groups that spanned a range of verticals—retail, medical, financial services, insurance, travel, professional services, non-profit—and included a mix of Pitney Bowes customers and non-customers. The foci of each of these projects centered on aspects of Pitney Bowes’s core businesses—primarily mailstream-related products and services such as shipping and marketing—and extant documentation (final reports, executive presentations) reflected these concerns.

As an aggregate, we felt that the data gathered in these projects formed a body of in-house knowledge about small businesses, but it had not been brought together as a coherent whole, nor was it separated from the specific contexts of mailing, shipping, and marketing. We believed that doing so could help form a picture of what it means to operate as a small business, with mindsets, self-perceptions, challenges, and priorities distinct from larger businesses.

One challenge of our meta-analytic effort was thus to return to the original data and extract new insights with different research goals in mind. Analysis would need to be directed away from the areas in the company's core business, and toward a broader understanding of overall work practices in small businesses. Our driving assumption was that a new perspective or strategic question on the data would lead to new insights. This meant we needed to: obtain the original data from relevant projects, not just the analyzed results; ground new analysis in areas relevant to our current focus; and find data not recorded by the researchers because it fell outside the original project scope. Our approach was to engage the three-pronged meta-analysis mentioned above. First, we collected all available data across the projects, both written-up in the form of final reports and executive presentations, and unpolished notes and working documents. Second, we developed a new analytic frame that was based around the life cycle of a small business. Third, we interviewed the researchers themselves in order to extract knowledge and insights from their observations of small business.

DEVELOPING THE APPROACH

Criteria for inclusion, guiding research questions, and defining the object of study

The first step was to determine criteria for inclusion in the meta-study. Which of the many dozens of projects previously completed by the research organization would be most useful for understanding small businesses? Had other researchers already conducted secondary research we could take advantage of? We wanted to identify projects that might have collected data relevant to the understanding of small businesses, regardless if their original aim was to understand other matters.

Discussions of criteria for inclusion in the published literature on meta-analyses express concerns about studies employing different methods, theoretical perspectives, subject matter, levels of quality, or even different standpoints on the nature of data and the position of the researcher (Atkins *et al* 2008, Doyle 2003). Where there is little theoretical development or interpretation and what is presented is largely descriptive, these concerns probably exert only a minimal effect (*ibid*). This was the case for the in-house studies that we decided to revisit: they were mostly descriptive, attempting to influence management decision-making by offering a few conclusions from the data, and leaving any theoretical orientation implicit. Since our mission was to inform corporate strategy, we assumed that studies conducted with the interests of Pitney Bowes specifically in mind were more likely to contain helpful material, and so a large proportion of the research we included was in-house studies. We also searched for broader studies on the subject in academic and industry literature. It had been more than five years since some of our in-house studies were completed, so we felt it was important to include more recent research in order to account for socio-economic and demographic shifts that had taken place since that time.

The most crucial consideration we faced in determining which studies to include was the question of consistent definition, in this case of "small businesses." There was at the time no consistent definition of small business across the research organization of Pitney Bowes, nor across the secondary literature for that matter. Some studies defined by size, some by revenue. This meant we had to ask if

observations about companies that had, say, 50 employees were relevant to our notion of “small businesses” in the same way as those about companies with less than 10 or even less than two employees. Rather than focus on size, we attempted instead to highlight some of the key qualitative characteristics. What distinguishes small businesses from other businesses? What do they care about? What motivates them? How do they see themselves as different from big businesses? For our purposes, a key point became how and why the work small businesses do might matter for understanding other dimensions of their business (staffing decisions, customer orientation, supply chain management, etc).¹

Reanalysis

The next step was to collect existing documentation from each project, code relevant material by categories, and create new categories as they emerged in the course of analysis. Since the aim was to articulate the company’s store of insights about small business as a means of informing strategy, our approach was to separate the data about small businesses from each project’s particular focus. To organize the data in the course of analysis, we created an initial categorization of elements of a small businesses lifecycle, based in part on our previous knowledge of the data set. These were working categories that we assumed would shift and change from the bottom up as the data was analyzed. The starting categories included items such as Start up, Staffing, Growth, Supply Chain, Financing, Customers, and Partnerships. To redirect the analysis away from earlier project concerns, we deliberately excluded categories specifically focusing on mail, shipping, or marketing—the primary subject areas of the studies we were re-analyzing.

In order to develop this analysis, we needed to get as close to the data as possible. Existing documentation ranged from final reports and final presentations, description of concepts, interview notes, and audio recordings. Since final reports aim to deliver actionable messages to management, they tend to offer interpretations oriented toward the focus of the project and relatively little in the way of original data. We expected that much of the data we were seeking would not have been of primary interest to those collecting and interpreting the data for the original projects. A researcher looking at mailing and shipping, for example, may not delve deeply into the issues a business had at start-up. At the same time, we assumed that many other dimensions to small businesses were observed during site visits than the shipping and marketing concerns that were the driving research concerns of the original studies. This was, in effect, the “extra data,” that McCracken has argued that ethnographers should

¹ Before the results of our study were circulated, small businesses at Pitney Bowes were typically thought of as businesses below ‘x’ in sales or ‘y’ in amount mailed—as just another segment for selling meters and mail support. Sharing the results of the meta-study was a way to begin to shift the internal orientation to the concerns and priorities of small businesses. In very brief form, two insights from these results should begin to illustrate both the natural of this internal shift and, more generally, the output of a meta-approach based on new questions. Most fundamentally, small business are not smaller versions of big businesses. In fact, they define themselves *against* big businesses (which they often call “big boxes.”) This means that small businesses do not simply want to grow (which had been the prevailing internal assumption)—they want to get better, not just big bigger. Second, running a small business is “personal.” Notice how many small businesses carry the name of their owner; their name is the owner’s name. Owners have a personal stake: it’s their quality, their reputation, *their name*; the reputation on the line is *their* reputation.

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not lose, noting the wide net we cast in research, with only a narrow portion used in the results of a particular project (2006: 1).

To supplement the documentation we collected on the projects, we decided to interview the original researchers themselves. We asked them to consider what they knew about small businesses that was not explicitly a part of their past projects. To jog their memories, we gave them a list of topics to mull over in advance. And since many of the interviews took place over multiple sessions, interviewees had plenty of time to reflect and remember.

The new data gleaned from the interviews was coded and clustered with other material. We then cross-analyzed and synthesized the results, using insights gained about the research processes to influence our interpretations. This led us to revise, combine, and remove insight categories for a draft report. We then circulated the draft to interviewees, inviting their feedback, comments, and critiques—the main outcome of which was that our interim findings were largely vetted by the original researchers.

ETHNOGRAPHY OF THE ETHNOGRAPHERS: META-STUDIES OF RESEARCHERS AND RESEARCH PRACTICE

Besides uncovering rich insights and observations not captured in project documentation and vetting our own analysis, interviewing the original researchers also enabled us to undertake an “ethnography of the ethnographers.” This meta-ethnographic endeavor turned out to be a “reflexive ethnography” literally of a higher order: rather than a single ethnographer reflecting on the biases or limits of his or her own method or positionality, it offered insight into the biases and approach of multiple members of a research division over several years. As a new tool with broad potential application, it offers an opportunity to reflect on, adjust, and hopefully improve, research practice—how a particular organization’s researchers have tended to conduct research, come to insights, and make conclusions.

Researcher interviews allow for the possibility of experiencing what it is like to be an interviewee. In this and other ways, they are an opportunity to reflect on interview practice and to integrate insights into future practice. The expanding use of researcher interviews is also a response to a “perceived lack of clarity regarding the appropriate criteria for appraising qualitative studies” (Bryman and Cassel 2006: 43) and has emerged against the backdrop of perceived relative consensus in appraising quantitative studies. Thus, like other meta-analytic approaches, researcher interviews are a means of establishing confidence in the conduct and findings of qualitative research.² In focusing on the practice of

² There is a growing use of what has been called the “researcher interview” among social scientists (Bryman and Cassel 2006). This practice has precedent in the social studies of science, the anthropology and sociology of science (Latour and Law 1988), and reflexive sociology more generally (Bourdieu 1993, Bourdieu and Wacquant 1992). An aim common to all of these is to better understand the role of researchers, scientists, and analysts in the practice and production of science or social science. Indeed, reflexivity in social science has itself been described as “a sensitivity to the significance of the researcher for the research process” (Bryman and Cassel: 45). We might

interviews, however, Bryman and Cassel seem to miss more crucial aspects of a reevaluation of research practice in applied settings—aspects like synthesis, interpretation and presentation of results, not to mention reception of those results by various clients, audiences, and stakeholders. Our ethnography of ethnographers approach is thus more comprehensive than simply engaging in researcher interviews.

There are at least two basic ways of approaching this sort of meta-study. One is to ask interviewees to reflect on their own research practice. Another is to take an anthropology or sociology of science approach in which the analyst is embedded in and yet not officially a part of the practices which he studies (he is not a physicist, for example, but spends an extended period in a physics lab). The former is likely to be subject to bias in self-presentation. The latter is likely to be too costly in resources for most applied and business settings. We therefore used the occasion of interviews to reflect on how other researchers conduct research and come to insights and conclusions. We asked researchers what they knew about subjects that were not explicitly a part of their past projects—as opposed to asking them directly about their approach to research and analysis.

Interviewing researchers directly about the practice of research might contribute to a desire to tweak their representation of the process more than when researchers are asked to provide more background and insights about aspects of a project that were not reported on in the written output. Researcher interviews, like any social interaction, are an instance of the performance of identity (Goffman 1967)—in this case, the interviewees are expert researchers themselves and so are under pressure to display that identity in the course of the interaction. In our meta-study, this was especially evident in the case of interviewees known for their intelligence and expertise and their penchant for displaying it. And just as some interviewees may feel the need to perform their identity as experts, the same is true for interviewers, since their skills as interviewers are on display in the very moment of interviewing other researchers. Moreover, interviewers' own biases about how research should be conducted could influence the second-order reporting.

All this suggests that care should be taken to put the results of ethnographic study of ethnographers in perspective. Especially if conducted by an in-house expert, that expert is likely to be under pressure to demonstrate expertise, insight into the very practices he has been tasked with observing—and improving. At the same time, it can be a powerful tool for delving deeper into prior research, not only for unearthing “hidden” data and shedding light on earlier interpretations, but also for understanding (and improving) research practice.

METHODOLOGICAL CONSIDERATIONS: CAUTIONS

think of this as one of a series of reverberating effects from the insights that originally came from Heisenberg's uncertainty principle in physics (if we know that the researcher looking for waves finds waves than we know that the researcher plays a fundamental role in shaping the output of science). These insights found their way into the reflexive turn in anthropology and science studies in the 1980s, which questioned the role of anthropologists and ethnographic authority in anthropology, and the role of the scientists in science more generally.

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In this section we reflect on our methods and how they may or may not hold in other circumstances. While our adaptation of qualitative meta-analysis was in a sense ad hoc—it developed out of a specific instance and need—we believe it offers significant advantages, as well as potential for wider application. But it also comes with some dangers. Perhaps the greatest risk of meta-analyses lies in the allure of possible greater robustness of insights and confidence in results. *This is because a poorly executed meta-study or a meta-study based on poorly designed studies will yield misleading or poor results that are nevertheless assumed to be more robust.*

Despite assumptions of their authority and robustness, meta-studies are subject to various forms of distortion, bias, and misleading or inaccurate conclusions. These dangers turn on similar considerations of researcher savvy, slant, or bias; the quality and validity of research design, data, and interpretation of studies employed for the meta-analysis; decisions about which studies to include; and possible loss of original context or nuance.

The prevailing wisdom on meta-analyses, particularly quantitative ones, is that a good meta-study of badly executed or designed studies yields bad results.³ How much this is a danger in qualitative meta-studies arguably depends on the researcher. In any qualitative study, analysts need to evaluate other researchers' second- or third-order insight with a degree of skepticism; they should not simply accept or apply prior claims. Similarly, it is up to the meta-analyst to carefully evaluate the merit of the data and interpretations on which he bases the meta-study. In this sense, perhaps paradoxically, a qualitative meta-study may be at least as dependent on the skills (and slant and style) of the researcher conducting it as is an individual study. Interpretation is the core of the very exercise and yet both the analyst and the ultimate audience are likely to believe that the output of a meta-study is more authoritative than any individual study. Analysts may paradoxically appear as interchangeable, their role downplayed by the very assumption of generalizability or reproducibility of findings.

This raises a concern about researcher savvy, skill, or bias which cuts across the different techniques we employed (repurposing and reimagining pre-existing data, analysis across past projects, ethnography of ethnographers). The meta-analytic researcher plays a crucial role in evaluating the validity or generalizability of whatever material they are analyzing—whether it happens to be the “data”, interpretation, or research design. Even what “data” is included in a study, what notes are recorded and presented, and certainly what appears in reports—are all a matter of interpretation. Since a meta-analysis aims at generalizing across studies, extra care must be taken to consider the validity of the studies themselves, especially in terms of their application beyond their original contexts. Sufficiently savvy qualitative analysts should be able to pull out data and interpretations that are relevant to the specific question driving their meta-analysis, and naturally exclude the rest; this need not mean an exclusion of entire studies that are aimed at different questions to begin with.

Nevertheless, there are considerations that may challenge even the most skilled analysts. Original interpretations are made by researchers other than the meta-analyst and in a context likely to be

³ Of course, in an industry setting a meta-analyst is likely to have relatively few studies to consider and so may not have the luxury of excluding ones that were hastily conceived or executed. In such cases, this may be a point in favor of attempting to include relevant published studies. In any case, concerns about selection criteria are likely to be an important consideration in applications outside business.

unknown to them. The difference between an interpretation and an observation may seem unclear. Moreover, because the analyst is pulling strands out of many studies at the same time, he is likely to be more attuned to the goal of a greater synthesis, of producing conclusions that appear to be of interest to the current concerns of the company or the sponsor, than he is to evaluating the original interpretations that are the fodder for this exercise. These concerns also point to practical difficulties in establishing a baseline for the interpretive re-analysis. Researchers undertaking a meta-analysis will have varying degrees of familiarity with the original projects and data and this will influence how they initially frame guiding questions and categories for their project. These and other differences in researcher orientation will need to be taken into account in designing and evaluating the credibility of a given meta-study.

Generalizability

In re-analyzing the material from past projects, we needed to carefully judge how much the observations we were reviewing—concerning customers or partnerships, staffing decisions, and the like—might apply in different contexts (geographical locations, different time periods, and so on). This is a consideration that social researchers always face: to what extent are specific data unique to the instance observed or generalizable to other instances, and in which instances. We took pains to disregard any data, insights, or interpretations that appeared to be time or location dependent, and weighted more heavily what was supported across multiple projects, locations, and times.

The aim for greater generalizability, like the act of comparison across qualitative cases, by its nature privileges higher order interpretations or conclusions and downplays the nuance of particular cases. This is perhaps Noblitt and Hare's main worry in their classic piece on meta-ethnography. But it is a false dichotomy: more comparability does not *necessarily* mean less nuance (especially in instances in which the original studies are not deeply contextual to begin with); it means retaining nuance that supports the claims that hold across cases. The claims that do not hold across cases are simply not of interest in a meta-study. There is no reason to assume that this skews results.

Old data

The question arises whether using old data might bias results. This is linked to another question: does a project's success depend on gathering new data? In industry, the latter question is often answered in the affirmative because sponsors are frequently convinced that only new data (fresh from "the field") can be of value. To the former question, we assert that old data bias results when the old data are no longer valid. In this sense, old data are no different from bad data. There is nothing inherently advantageous about new or old data; what matters is whether they continue to hold. But the return to apparently "old" data has another possible advantage—that characterized by the "historical" turn in the social sciences—the possibility of demonstrating that the observation or data point is not just a single point in time but more than one, or a continuous one. For applied purposes, especially business, what is of interest is the indication that what has been observed is enduring and thus, perhaps, more closely held, less likely to change, more dear to the community in question. Whatever the particular case, a thoughtful reflection on the quality of the data, as well as the quality of the study, is a necessary step in meta-analysis.

Increasing confidence in the validity of meta-studies

Besides the above tactics, a number of measures can be taken to increase confidence in the results of a meta-study, among them, as noted above, interviewing the researchers themselves as a way of both pulling out data that were not recorded or retained in the individual studies and circulating the conclusions among researchers who were involved in the past projects studied. Results may also be vetted with relevant stakeholders and research subjects. In our case, for example, we solicited (and obtained) feedback from senior managers in other parts of the company with knowledge of small businesses. Finally, due to issues raised by researcher-researcher interactions and the crucial role the meta-analyst plays in the process, the recording and review of researcher interviews may be crucial. An interviewer is unlikely to be fully aware of the influence they are exerting in the moment of the interview; this may be better gleaned by listening to the recordings after the fact, and perhaps by a third party.

BROADER APPLICABILITY: OPPORTUNITIES

All this points to a larger question about when meta-studies can be used most profitably. One of the key opportunities we see is to conduct meta-studies as a new tool for auditing research practices in a wide range of settings (e.g., organizations, research divisions, consulting practices). Like any ethnographic audit, a meta-study could provide much needed opportunity to reflect on, improve, and refine established research practices in a given operation—including how questions are framed, data collected, insights arrived upon, and conclusions determined. Rather than a single ethnographer reflecting on the biases or limits of his or her own method or positionality, it offers insight into the strengths and weaknesses of research practice in specific settings over many years and among many researchers.

What we have proposed throughout is a new look at what reviewing existing data might offer when new guiding questions are driving a research team, particularly more general and open-ended questions. Advantages include the ability to:

- Create a larger, more robust data set from many smaller studies. By drawing on different researchers, projects, and field research settings, they may offer more generalizable insights than one-off ethnographic approaches typical of projects geared towards a specific question
- Take advantage of available in-house data to address new strategic questions or provide conclusions with more robust empirical backing
- Review beyond what is published, reaching back to data, enabling more insights than can be gleaned from analyzing results and analysis only
- “Do more with less” (i.e., save considerable human resources by not conducting new empirical research)

Clearly meta-studies cannot be a stand-in for new research. What they offer is distinct. What is to be avoided in any case is a false confidence in the output of a meta-study. Any study deserves follow up for further confirmation. Researchers need always to be on the lookout for errors or misleading

suggestions in their past work as they conduct new work. The aura of robustness and confidence of meta-studies should not lead researchers or their audiences to forget this.

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The Power of Participant-Made Videos: intimacy and engagement with corporate ethnographic video

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Participant-generated, self-made videos engender powerful, often highly emotional, reactions from viewers who experience a stronger connection and identification with participants and their experiences than we have ever achieved with researcher-shot footage. Reactions have ranged from shock, discomfort, and offers of Freudian psychological analyses to laughter, immediate recognition and discovery. Through several video examples from recent fieldwork we explore the reasons for this heightened reaction, and raise questions related to representation, authenticity, intimacy and the role of the ethnographer in the age of YouTube, social networking sites, and reality TV. What is the ethnographer's role when participants share their lives in videos we request that are stylistically similar to online user-generated content? What is that ethnographer's 'Do', and what role does she play in editing, framing and presenting these videos? How do participants conceptualize what they are creating?

INTRODUCTION

Ever since we got a peek inside Nanook's igloo, walked down a long corridor toward a hall full of screaming supporters with John F. Kennedy, witnessed the Loud parents break-up in the middle of a fight, and peered inside the bedroom of the first Real World, viewers have been fascinated by intimate glimpses into the private lives of others. (Flaherty 1922; Drew Associates 1960; Raymond & Raymond 1973, MTV 1992) In corporate ethnography, stories from the field, photographs, and video have long been used to bring the world of research participants to life. Their habits, practices, joys and frustrations come alive, especially through video, and help us communicate insights to colleagues and customers. As ethnographers at Intel Corporation, the content of our videos has generally consisted of interviews with research participants and observational footage of their daily practices in the home. In the last few years a new, transmissive part of our research methodology has driven our video documentation practice in a different direction as we supplement our traditional Ethnographer-Made Video (EMV) with Participant-Made Video (PMV). In 2008 we began taking advantage of new, inexpensive video technologies that allow our research participants to share their everyday lives by filming themselves. Equipping research participants with cameras, both still and video, is not a new practice either in anthropological research (Collier & Collier 1967; Worth & Adair 1970, 1972; Frota 1995; Pink 2007) or in other disciplines invested in ethnographic research methods, such as user-centered design (Brun-Cottan and Wall 1995; Ylirisku & Buur 2007; Raijmakers, Gaver Bishay 2006; Bean 2008), and HCI (Taylor, Wiche, Kaye 2008; Reponen, Lehikoinen, Impiö 2007). Additionally, education researchers and educators (including anthropology professors!) have embraced low-cost video cameras as part of educational training with students in and beyond the classroom (Rowell 2009; Durrington 2009). Recognizing the multiple ways videos made with Flip video brand cameras are used to enhance education experiences ("From video book reviews and school news reports to teacher observations for professional development,") Pure Digital, makers of Flip Video cameras, offers

discounted prices to US based educators so they can use video as a “hands-on way for students and teachers to engage more deeply”.¹

This marketing rhetoric rings true for how PMVs have enabled us as ethnographers to engage more deeply with our stakeholders. The videos our participants make have a sense of immediacy and intimacy, and elicit emotional responses and curiosity to learn more on the part of our stakeholders. Unlike our EMVs, the videos our research participants make using video cameras are not talking head interviews or footage of participants pointing and explaining how they do a particular activity; instead they offer a glimpse of participants doing activities they normally just talk about when we are there. We increasingly find that we use more PMV in our research presentations than traditional EMV primarily because they engender powerful and often highly emotional reactions from viewers and transfix our stakeholders who experience a stronger connection and identification with participants and their experiences than we have ever achieved with footage shot by researchers. We use these attention-grabbing videos to engage engineers, sales representatives, and key decision-makers internal to Intel Corporation, and drive key research insights and recommendations more effectively than we have been able to through slides and photographs alone.

Stakeholders react to PMVs as *less* mediated, and more real, than the footage we have traditionally shot, though these highly reflexive videos are as consciously staged as a slice of reality as our EMV. The politics and problematics of self-presentation, have been well explored, and clearly PMVs are another manifestation of identity work, and performativity (Butler 1990, 1997). Research participants often model their performances in these videos on widely available user-generated content (UGC) they are familiar with on the Internet. Indeed, the popularity of online user-generated videos including video diaries, and new ways to distribute and share those videos on YouTube and Facebook serve as inspiration or, at the very least, an example for research participants when they are faced with the task of creating their own self-reflexive videos. Reality TV shows and their individual, direct-to-camera confessions are another illustration for participants. Our participants follow several documentary video conventions consistent with UGC and reality TV, and in the absence of visual and audio cues of a middleman – the guiding voices and presence of the ethnographers –PMVs can initially appear indistinguishable from the types of videos stakeholders are familiar with from content sharing sites like YouTube.

While the EMVs we produce of our in-home conversations make clear the nature of the interaction and power dynamics between the ethnographers and participants, (rendered visible through our presence and guidance of the conversation) in the PMVs the nature of the ethnographer/participant relationship is masked; we are not present, and the relationship primarily unfolds off-camera. The heightened intimacy and engagement our stakeholders experience with these videos poses new challenges for how we, as ethnographers, consistently and assertively guard the integrity of these research materials and our relationships with our research participants.

Asking research participants to shoot their own videos is not new; and these videos are not more or less real, complete, or genuine than other ethnographic representations. What is significant and

¹ See <http://www.theflip.com/en-us/buy/Educators.aspx> for more information

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revelatory about participant-made videos is the privileged view they offer of intimate moments in our research participants' lives – moments we are not privy to when we are physically present in their homes and have previously not been able to share with stakeholders in such a direct and visually rich way. During a home interview, we may see how people lie on their living room floor to watch TV; in a PMV we may see them late at night in the bedroom, half asleep watching TV. No matter how much these videos build on shared cultural templates for how to properly share intimate moments with the world, (or at least large, unknown audiences such as YouTube and Reality TV viewers) these videos are the product of our relationships with our research participants, produced for very specific and clearly defined audiences that are always directly tied to the ethnographers' presence and presentation. While we, as ethnographers, are less present in the actual videos than in our EMVs, our presence is arguably more urgently required when viewing these videos than with other representations of participants' lives that we produce in our ethnographic practice. Because our research participants entrust us with personal, private views of their home life that are intimate and engaging for our stakeholders, we take great care in how we frame, interpret and share them.

SOLICITING PARTICIPANT-MADE VIDEOS

We first added PMVs to our field methods in 2008 as a variation on a fairly standardized three-part engagement with households. In a given project, we visit each household twice during the course of a roughly two to three week period while we are in field locations that can range from Phoenix to Jogjakarta. The first visit generally consists of an open-ended ethnographic interview, home tour and tour of other relevant locations, during which we video tape and take still photos. We end the first visit with a request that the participants complete a research exercise before we return in approximately 7-10 days. These exercises have included photo diaries, mapping exercises, and video questionnaires using Flip Cameras. Many of the between-visit research exercises we ask participants to complete result in artifacts we use only with them and rarely share with stakeholders. We use exercises to help us engage with our participants – to start a conversation, to probe on topics and practices that come up during our first interviews that we feel we do not fully understand. We discuss with participants how we will use these materials, and participants sign written release forms that clearly detail how the materials will be used. They are also given copies of these release forms for their records. The release forms detail that the materials can be used for Intel internal presentations as well as external presentations such as business meetings, conferences and research publications, but that digital (or analog) copies of the materials will not be distributed beyond the researchers, and that materials will not be posted on the Internet or used in any marketing campaigns. Participants understand that we will show these materials to various audiences in the course of our work, but that we will not further distribute or publish the materials. During the second interview, we watch the videos together with the participants and discuss the content – both the scenes and activities they recorded, as well as further questions these videos prompt us to ask. Occasionally, participants have recorded a video they then decide at the second interview they do not want us to have. We then immediately erase the video from the camera and our laptop so no copies exist.

With the raw PMV footage we elicit from research participants we edit and create video artifacts that we use in a number of ways. While we have not created artifacts with complex editing or a re-worked narrative structure like the Design Documentaries described by Raijmakers, Gaver, Bishay

(2006) or the portraits described by Yliriski and Buur (2007), we always edit videos we present to stakeholders — from tightening-up the pace on a single clip, to audio narration, subtitle overlays, and montages created from multiple videos of one or several participants.

The most common use of these video artifacts is to describe our practice and the user experience definition process as illustrations of the type, and breadth, of ethnographic work related to television practices we have conducted in the last five years, and to illustrate the type of ethnographic work that is the starting point for our team's user-experience focused innovation process. We also use these videos with product development teams to illustrate the physical, social, cultural, and technological contexts in which the product they are developing will be used. The videos are short, (1-3 minutes, occasionally up to 20 minutes long,) and are designed to prompt participants' actions and reactions to specific tasks or questions rather than systematically capture ongoing interactions with technology that can be analyzed frame-by-frame and used in a product design process.

HEIGHTENED ENGAGEMENT WITH SELF-MADE VIDEOS

We value the videos our participants have made for us, and our stakeholders are captivated by them, because they depict participants *doing* things they normally only describe to us during in-home visits. They are consistently more entertaining and engaging to watch than the footage we shoot during interviews. For example, over the course of a three-hour interview with the Sudah family outside of Tokyo we learned of several ways members watch television throughout a typical day – in the morning, while doing household chores, while driving to work, while cooking and eating dinner, and in bed before falling asleep at night. While useful information, none of this (besides perhaps watching in the car) seemed particularly interesting, and none of the footage of the Sudahs *describing* these activities is visually gripping. However, the PMVs the Sudahs subsequently made for us *doing* all the types of TV viewing they described during our interview arrest our viewers every time we show them. In research report-outs, in customer meetings, and in internal corporate events promoting user experience research, we have used a version of these videos edited into one longer clip showing how the Sudahs watch TV during a typical day. We have also used selected video segments to illustrate how ordinary, personal, and extremely intimate television viewing can be. All of the Sudah family's videos provoke strong reactions from viewers. The images resonate with viewers' own lives – cooking with TV; folding laundry with TV, and eating dinner with TV. They also bring forth a more complicated mix of desire, amusement and disapproval incited by footage of the Sudahs watching TV while driving to work, and a scene of Mr. Sudah watching TV before bed while his adolescent daughter gives him a foot massage. In the US, we are routinely asked if we have intervened to stop Mrs. Sudah from watching TV while driving, and have been advised about Freudian theory and the psychological damage the Sudah daughter is incurring by massaging her father's feet.

As the reactions to the Sudahs' PMVs illustrate, one of the most important reasons our PMVs are useful and valuable is the heightened engagement they provoke with viewers. Viewers find the videos more compelling than our EMVs, as participants are depicted engaging in daily activities or actively engaged in illustrating *in situ* what they usually do, rather than responding to interview questions. The videos generate emotional reactions and practical questions such as, "Is it legal to drive a car and watch TV at the same time in Japan?" These questions help us engage with stakeholders and make them

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more receptive to our research-based business recommendations. In the end, the PMVs become as much prompts for starting in-depth discussions *with stakeholders* as they are probes we use with participants.

We also value PMVs because participants experience a more heightened engagement in sharing their experiences with us than they do when we film, as they take an active role in constructing how they will be portrayed. They are conscious that they are performing and that this performance has an audience beyond the two ethnographers currently in their home. Anticipating these audiences, participants are *doing* much more with these exercises than the actions and words captured on video. They are creating intentional representations of who they want others to imagine them to be. When asked about creating PMVs, participants tell us that they are more self-conscious when they film themselves than when we film them during interviews. Brett, a 28-year old self-employed event planner in London explains it this way:

Brett: When you're here, I just forgot that you're pointing a camera at me. But when you're doing it yourself, you are kind of conscious of it all the time. Aren't you? And trying to get it right, so it's sort of a video, something that might be interesting...if anything, it's easier when you're here because I don't have to think about it (the videotaping.)

Another Londoner, 18-year old student Ray, takes it a step further.

Researcher: How did (making videos of yourself) feel for you?

Ray: Knowing that I was being watched, I tried to act as if I wasn't being watched, having to do it myself. I did it all myself as well, so I set the camera up, walked over to what I was doing before and then after a minute or so walked back around it and turned it off. It was fun, awkward at times. I think there was two I deleted and re-did just because I looked a bit silly. I didn't want to look too silly.

Researcher: How did it compare to being filmed by us?

Ray: I dunno. I guess I'm not in control, so it's easier. I can be myself, whereas I felt as if I was almost acting when I was doing it myself. I dunno. I just didn't feel at ease, if you know what I mean.

Even though we use a much larger video camera and a sizeable shotgun microphone when we interview people in their homes, neither of these men felt the self-made videos were more real or genuine, but they were more invested in the image produced when filming themselves than they were when we filmed them. They, and other participants, also captured scenes and moments that we were not invited to witness first-hand, and that any outsider would be unlikely to see. The videos are simultaneously intimate and mundane: time in living rooms, bedrooms and cars (and bathrooms!); family dinners; small crises, and boring Sunday afternoons. The often shaky hand, poor lighting, and questionable audio of these videos only furthers their authenticity as glimpses into other people's lives.

PARTICIPANT CONTROL AND ETHNOGRAPHIC CURATION

With the participants in control of the recording, they can carefully orchestrate how they want to represent themselves while simultaneously sharing moments that are much more intimate and mundane than our presence as researchers in their homes generally allows. Stylistically, participant-made videos fall along a continuum between two extremes. At one end are narrated videos in which the participant explains what he or she is doing, and at the other are ‘fly-on-the-wall’ videos in which the participant consciously acts as if he is not filming himself. In narrated videos both the viewers and the creators experience an immediacy and collapse of distance. The participant addresses the camera directly and acknowledges the viewer with statements like, “You’ll be interested in this,” or “I really want you to see how I do that.” In the case of Cédric, a French teenager, this means starting a video by repeating one of our questions to him. He says, “What a good TV moment means to me is,” and proceeds to act out, and narrate, all the components that go into a fun TV-watching experience – putting his feet on the table, drinking ice tea right out of the bottle, choosing mindless music videos his mother would despise. In fly-on-the-wall, ‘*cinéma vérité*’ videos the viewer has a sense of the action unfolding in such a natural, unplanned way that it seems it would have happened whether the camera was on or not. For instance, a mother in Hong Kong cooks and serves dinner to her children and they eat while watching TV. In some cases the fly-on-the-wall feeling can seem voyeuristic and the viewer feels privy to a moment she wasn’t supposed to see, such as Mia Sudah giving her father a foot massage.

Four PMVs that have elicited strong viewer reactions illustrate both the diversity in participants’ self-representation styles, and the different types of work we, as ethnographers and curators of these intimate videos, take when presenting them to varied audiences. To make them more than YouTube style clips offering arbitrary, intimate glimpses into people’s daily lives, and into insightful research data for our stakeholders requires that we position and contextualize the videos in our broader knowledge of the research participants and of their cultural practices.

One of our most powerful, thought-provoking and frequently viewed videos is from the Sudah family in Japan. The image of Mia, the teenage daughter, giving her father a foot massage as he lies on a futon before going to sleep epitomizes a fly-on-the-wall video. It is late at night; the girl is wearing a robe and a towel around her wet hair. It is a privileged view of a warm family moment that shows us one of the myriad things people do while watching TV. When we show this video to stakeholders we explain the foot massage is another ordinary event in the course of the Sudahs’ TV-watching day. Its hold on viewers lies in the intimacy of the scene, the otherness of the activity, and the feeling that we are seeing a nightly routine that has never been shared with anyone before. In addition to shock, and occasionally offense, some viewers react with envy to this footage and express a desire for their own foot massage. While the foot massage draws in viewers, there is a larger point we are making when we show the video. Because the scene is arresting it is a useful example to start a conversation about the many postures people adopt while watching TV, and the diversity of activities people engage in while watching. It vividly communicates for stakeholders the tension between how people really watch TV, (at least at certain times of the day,) and the interaction intensive technology of Internet connected-TV.

If the foot massage comes across almost as voyeuristic, the clip created by Cédric, the French teenager who narrates a very funny video about his ideal TV watching moment, is a good example of

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the other end of the spectrum. He is putting on a very entertaining show that includes a mini-advertisement for ice tea (he apologizes for “*le pub*”) and clever production credits at the end. The clip grabs the attention of stakeholders because it’s witty, smart and well shot. Viewers laugh at Cédric’s jokes, and his description of his ‘magnificent couch,’ as well as nod in recognition that his actions are similar to how they watch TV. We explain to them that it was filmed solo by Cédric, and that the clip shows a side of him we researchers never got to see when we were with him and his parents. Making the video was a creative act of joyful teenage rebellion that wouldn’t exist if we (or his parents) had been there while he filmed it.

Another video that elicits a strong, but very different type of response shows Brigitte, a Parisian grandmother, who has just returned late from babysitting and is frantically trying to watch her daily soap opera on a malfunctioning TV. She pushes buttons and whacks at the set before scurrying into her bedroom to watch the show on a smaller TV that is not connected to her faulty IPTV service. The clip provokes laughter, piques interest, and reminds stakeholders of similar frustrations in their own lives. We tell them it is a moment we wouldn’t have been there to witness, and Brigitte’s great fluster and panic are emotional states we very rarely see in our role as researchers. It’s a fly-on-the-wall moment that underscores how flawed, buggy technology results in real emotional distress, and stakeholders are captivated by her aggravation. We use the clip to start a conversation about what’s at stake for consumers when their favorite technologies don’t work.

Somewhere in the middle of this continuum is a style of participant-generated video that feels fly-on-the-wall, but is carefully narrated and explained. American college student Sherry apologizes for “doing nothing” on a Sunday afternoon. Three housemates sit in the living room relaxing in front of the TV. Sherry is searching the Internet, updating Facebook, playing a computer game, and doing homework. Her boyfriend is hanging-out, and her brother is “about to start” texting friends on his phone. A moment this mundane rarely occurs when researchers are in a home, and it is a powerful reminder to stakeholders that technology is seldom used in isolation. Stakeholders discover something that deeply affects the way they think about designing technology —“doing nothing” means multi-tasking with multiple screens, services and applications.

CONCLUSION

In an age when the ability to make and share videos of home life and reality TV makes docu-soaps like *Keeping Up With The Kardashians*, and *Jon and Kate Plus 8* regular viewing, PMVs create an interesting tension in our practice as ethnographers. The styles our participants use in their PMVs make them look a lot like YouTube videos or snippets from reality TV shows – the types of content that are entertaining and can go viral on the Internet. While we would never publish these videos on the Internet, we do want the intimate moments, and the insights they convey, to go viral internally with stakeholders. We want stakeholders to talk about, remember and absorb our research so its lessons permeate their work, but we have an ethical obligation to our participants to be worthy of their trust in sharing the mundane moments of their daily lives that are not usually subject to public scrutiny, and to not use the video to make them ‘look silly’ as Ray feared.

What separates PMVs from YouTube is our skill as ethnographers. Participants do create more interesting videos than the ones we produce, and it's not hard to find people to shoot footage of themselves, (e.g. most of the You Tube library.) We have experimented with sending video cameras to research participants we have never met, and find that while we might get back video that is compelling and powerful, we are much more limited in our ability to interpret the footage and find the “so what?” kernel at its core. But, it takes a trained ethnographer who has spent time getting to know the subjects *in situ* to guide the video-making process, make sense of the resulting footage, glean insights that bring design or business-related value, and can frame and contextualize the video artifacts for diverse audiences and interests.

With PMVs, participants have taken an active role in the research, and when they are energized by the process, like Cédric, the Sudahs, Brigitte and Sherry, they produce video artifacts that go way beyond most ethnographer-made videos in their power to captivate, compel and entertain. As ethnographers we give up a lot of control when we hand cameras to research participants. Some of what we get back is unwatchable, unusable or painfully uninteresting. But, the good ones, the videos that transport us to places, activities, and moments-in-time that we would never have the opportunity to witness first-hand, are extraordinarily valuable to our ethnographic practice as a calling-card to explain what we do in vivid, visual terms, and as a powerful and direct way to communicate insights to stakeholders.

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Innovation in Collaboration: Using an Internet-Based Research Tool as a New Way to Share Ethnographic Knowledge

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Ethnography in business is only successful if it is a cooperative, communicative endeavor. Research teams must be able to share knowledge with one another and with the client. In the absence of effective communication, time is wasted, analytic quality can suffer, and the client may lose faith in the value of the project or the value of ethnography in business. This paper will address the subject of transmissirivity by defining four key needs for knowledge sharing in collaborative ethnographic research: direct experience of the research context, even distribution of knowledge, coordinated development of analysis, and management of the client experience. After synthesizing the literature on knowledge sharing to define these four key needs, the paper will describe how an internet based research tool can enable global, continuous, and controlled information exchange, meeting these needs in a new way. This type of solution can facilitate communication and enrich contextual understanding, pointing in a new direction for collaborative ethnographic tools. Particularly for dispersed teams, these tools can produce better, faster analysis and more relevant results—the most important deliverables to demonstrate the value of ethnography in business.

INTRODUCTION

Successful ethnography in a business setting depends upon the effective sharing of observations, analytic interpretations, and understandings between research team members and with clients. Getting the fullest meaning and value from ethnographic data requires exposure to the research setting and immersion in the analytic process (Howard and Mortensen, 2009; Cramton, 2001). In addition, the team must keep client needs and priorities connected to and informed by the ongoing insights that the ethnographic research is uncovering. Ethnographic researchers must have shared context, a mutual knowledge base, and strong trust in order to conduct situated analysis, as well as to work with clients and develop business recommendations in a way that fully demonstrates the value of ethnography.

Because ethnographic knowledge is based on interpretation, it is particularly difficult to share between individuals and across time and space while preserving meaning. First-hand, direct experience of both the process and the results is the most effective way to understand the process and gain necessary empathy for the subjects of research, but it is impossible to bring the client and all team members into the field at all times. To make things even more complicated, it is increasingly important to gather data from global markets to gain broad, multifaceted insights, which means research teams and clients are often widely geographically dispersed, and even individual researchers are finding it necessary to work remotely. This global dispersion makes effective communication more essential to the analytic process (Mohrman, 1999) while at the same time rendering it more difficult, necessitating new ways of communicating data and results.

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This paper will explore the challenges of sharing knowledge, experiences, and insights in collaborative ethnographic research. It will begin by discussing several analyses of the issue of collaborative communication in the existing literature and identifying key problems in effective knowledge sharing in ethnography. Cramton (2001) explores sharing among team members and identifies the ways that a “mutual knowledge problem” can disrupt effective collaboration. Similarly, Mohrman (1999) studies the challenges of dispersed collaborative research to point to successful organizational contexts that support such work. Meanwhile, Arnal and Holguin (2007) detail a list of “dissemination factors” which can enable researchers to best share knowledge with clients, incorporating them into an interactive, immersive ethnographic research process. Howard and Mortensen (2009) explain in depth the importance of sharing the entire research process with clients in order to effectively share meaning and value and ensure lasting impact.

Examining the intersection of these analyses of communication with both team and client, this paper will identify four key needs for successful collaborative ethnography: direct experience of the research context, even distribution of knowledge, coordinated development of analysis, and management of the client experience. It will then introduce an innovative internet-based tool that points in the direction of new solutions to these problems. It will explore, through the basic stages of a research project, how this type of internet-based tool allows for the four key needs to be met in a globally dispersed setting to enable remote collaboration. As ethnographic research becomes more often an exercise in dispersed and virtual collaboration, researchers will benefit from exploring innovative solutions that support contextual knowledge sharing by wholly addressing these four key needs, both for quality of results and in order to continuously demonstrate value to the client.

KNOWLEDGE SHARING AND COLLABORATIVE RESEARCH

The benefits of collaborative research come from developing insights through the combined capacities of multiple researchers. Collaborative research can incorporate a greater number and range of observations, and it allows for the development of more complex insights as researchers build off one another’s ideas. But researchers must continually communicate to unite these perspectives into a coherent final product. And as Krauss and Fussell (1990) note, communication can only occur in the presence of “mutual knowledge”, that is, knowledge that communicating parties share, and which they know they share.

Mutual knowledge serves as a foundation upon which to share new information and develop new understandings, as well as to move forward effectively through analysis, synthesis, and development of resultant strategies. The more knowledge two people share by mutual experience or observation, the less time they have to spend communicating these concepts and establishing a shared knowledge foundation, leaving them free to generate new ideas. Additionally, knowledge that is shared or pooled by multiple collaborators is more likely to be brought up, discussed, and incorporated in collaborative discussions than information held by only a single party (Stasser and Titus, 1985). In a collaborative ethnographic research setting, establishing a broad base of mutually shared qualitative data is thus likely to result in more rich and nuanced conclusions.

The negative effects of a lack of mutual knowledge are well established in the literature. Stasser and Titus (1985) find that discussions that involve unevenly shared knowledge are likely to lead only to conclusions that support the biases the parties held upon entering the discussion. This effect is exhibited even more strongly in dispersed groups using computer-mediated communication (Hightower and Sayeed, 1995). Cramton (2001) proposes that such groups may attempt to avoid discussion biases by spending more time on communication, leading to a trade-off between decision quality and productivity. A lack of mutual knowledge may also have a negative impact on collaborator relationships, since differences in understanding can lead to attributions of personal failure (Blakar, 1973). Once again, these problems are likely to be exacerbated by reliance on computer-mediated communication (Siegal, Dubrovsky, Kiesler, and McGuire, 1986).

In her study of geographically dispersed collaborative work, Cramton (2001) found that episodes of frustration, conflict, and confusion typically resulted from five types of problems:

- (1) failure to communicate or retain contextual information, (2) unevenly distributed information, (3) differences in the salience of information to different individuals, (4) relative differences in the speed of access to information, and (5) misinterpretation of the meaning of silence (347).

The first four types directly involve differing or ineffectually communicated knowledge, while the fifth type, misinterpretation of silence, is generally caused by a lack of contextual information that would have led to a more accurate interpretation. This demonstrates the importance of effectively establishing a mutual knowledge base in order to avoid serious difficulties in the collaborative process.

In a finding particularly relevant to ethnographic collaboration in business, Cramton further observes that “exacerbating factors” that most strongly contribute to breakdowns in mutual knowledge “can be expected to include heavy cognitive load, a complex, interdependent task, tight time limits, and a complex team design” (367). The first two factors in particular are characteristic of the type of qualitative and interpretive work of ethnography, while the latter two are typical in ethnographic research in business.

Mohrman (1999) indicates a number of reasons that dispersed teams may be especially susceptible to breakdowns in mutual knowledge and the resultant challenges such breakdowns cause. Membership in different departments or organizations often implies different business objectives and priorities. On a deeper level, it may also result in incompatible “thought worlds”—that is, divergent sets of knowledge, systems of meaning, and organizational routines—among collaborators, posing particular difficulties to the process of business innovation (Dougherty, 1992). Being situated in different geographical locations also roots researchers in different cultural contexts, opening up additional possibilities for mutual knowledge deficiencies. Potential results of these circumstances, according to Mohrman, include uncomfortable interpersonal dynamics, poor working relationships, inconsistency, misunderstandings, time delays, conflict, and uncertainty.

Mutual knowledge is, therefore, a key concern of collaborative research. Establishing mutual knowledge fosters effective, unbiased research and prevents a host of analytic and interpersonal

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difficulties. Because members of dispersed teams are situated in distinct contexts, not only will it be more technically difficult for them to establish mutual knowledge, but they will also hold less knowledge initially in common. It will thus be particularly critical for such teams to find ways to share their knowledge in order to ensure fruitful collaboration.

KNOWLEDGE DISSEMINATION AND CLIENT COMMUNICATION

While the above analyses focus on identifying the problems that arise from ineffective communication within the research team, Arnal and Holguin (2007), Howard and Mortensen (2009), and others address some potential problems and solutions of effective communication with the client, emphasizing ways to ensure implementation and convey the value of research results. Ultimately, many of the insights about effective communication gained by considering the researcher-client relationship can also be applied to enhance communication within research teams, and vice versa. However, as the literature shows, considering each perspective separately can lead to a richer, more encompassing understanding of the collaborative process.

It is necessary to effectively share the process and results of ethnographic research with clients in order to convey the real value of that work and ensure the findings will have a meaningful impact on the organization. Arnal and Holguin discuss six factors that serve to maximize the dissemination of ethnographic research: speed, transcendence, compellingness, reach, exposure, and involvement. Communicating results with increased *speed* (for instance by sharing analysis as it is developed rather than waiting until the end of the project) ensures that insights will be incorporated while still relevant. Greater *transcendence*—that is, connection to high-level business policies—allows ethnographic research to have a more significant organizational impact. *Compelling* research is more memorable and thus more likely to impact future decisions. The more people, departments, and levels research *reaches*, the more value it can provide to a company. When clients are frequently *exposed* to the insights emerging from the research process, they will internalize those insights and come to recognize their implications and importance. Finally, *involving* clients in the research process increases their understanding of and commitment to the insights gained.

Howard and Mortensen (2009) advocate similar principles. They attest to the power of directly involving clients in the ethnographic process—even bringing them into the field when possible. This overcomes skepticism about the value of ethnographic research, results in the deep empathy necessary for user-centered innovation, and helps businesses to break free from constraining preconceptions. In this way, several well-established organizations (including Mercedes-Benz, Nike, and Harley Davidson) have managed to overcome the limitations of their existing business models in order to expand into new markets and rejuvenate their corporate image.

There may be risks in sharing too freely with the client without actively guiding them through the process. Because clients are not trained in ethnographic research, difficulties including misunderstanding and reinforcement of previously held bias can arise if clients are exposed to partially developed analysis or incomplete data. Ultimately, though, ethnographers in business understand that, if done carefully, involving the client in the process builds trust, depth of perceived investment, and a culture of open communication (Diaz and Rideout, 2007).

FOUR COLLABORATIVE NEEDS

As discussed above, various forms of knowledge sharing in ethnographic research can improve collaboration both within research teams and between researchers and clients, while breakdowns in knowledge sharing can cause serious difficulties. When considered in combination, these observations point to four key needs that must be satisfied to ensure the success of collaborative ethnographic projects in business. These four collaborative needs are (1) direct experience of the research context, (2) even distribution of knowledge, (3) coordinated development of analysis, and (4) management of the client experience.

Direct experience of the research context (which might include video or audio footage, cultural background and exposure, and physical context) minimizes mutual knowledge problems. The common alternative to achieving mutual knowledge through direct experience is to achieve it through explanation and interaction. However, Cramton has noted that receivers are less likely to retain contextual information conveyed in this way, and are also less likely to pick up on more subtle factors such as information salience. In Arnal and Holguin's terms, providing clients with direct experience of the ethnographic process (as exemplified in Howard and Mortensen 2009) can heighten the compellingness of the research. This can also encourage more people to engage with the material, extending reach. Opening the ethnographic context to clients during the research process, in a controlled manner, provides additional chances for exposure, and gives them an earlier opportunity for input, increasing the speed of both knowledge transmission and feedback. However, this is especially difficult to execute effectively between dispersed team members.

Just as important as direct experience of context is an **even distribution of the knowledge** arising from this experience. In-group behavior tends to emerge in contexts of unevenly distributed information, particularly among dispersed research teams, due to uneven exposure to qualitative data (Cramton 2001). This behavior detracts from effective collaboration. Furthermore, when some observations are more widely shared within a group than other observations, the group tends to discuss the shared pieces at the expense of those that are uniquely held, limiting the pool of data from which they draw their conclusions. This tends to support the biases with which discussants entered the conversation, as it makes it difficult for new information to enter (Stasser and Titus, 1985), presenting a major challenge for both researchers and clients.

Direct contextual experience and even distribution of information can only take research so far in the absence of **coordinated development of analysis**. It is through the combined input of multiple individuals that the benefits of a collaborative research process truly emerge. Communication aids in the identification of salience and the interpretation of silence. Allowing clients to participate in the development of research conclusions, rather than to passively receive a finished research product, is a form of involvement that increases the likelihood that insights will be incorporated, reinforcing the value of the ethnographic research. This also allows for the type of input that will ensure that the research responds to relevant business objectives, thus maximizing its transcendence.

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To ensure success and avoid pitfalls of understanding, researchers cannot haphazardly throw the client into the mix—they need to **manage the client experience**. Researchers must include the client in the process, immerse them in the research, and disseminate information throughout the organization for lasting impact. As we have seen, showing the client findings while “holding the process hostage” (Howard and Mortensen, 2009) does not instill understanding or trust; researchers have to thoughtfully guide the client through the research with them. The factors of success in client communication are complex; clients and their needs differ, and there is no one way for researchers to ensure that they are imparting real understanding, maintaining trust, and disseminating the knowledge in a far-reaching and lasting way. Rather, each project requires its own personalized strategy for the timing, extent, and framing of the client’s exposure, in order to address the previous three needs in a way that maximizes the project’s overall effectiveness.

If all four of these collaborative needs are met, researchers will achieve efficient and productive collaboration and clients will receive ample evidence of the value of ethnographic research. This approach fosters trust among research team members and between researchers and clients, and results in relevant, complete, and integrated recommendations that are more likely to achieve successful implementation and show their value into the long term. But as discussed, each of the needs can prove challenging for dispersed research teams and busy clients to meet. Bringing an entire team to an observation session is not only difficult to schedule—it may also significantly alter the dynamics of the situation in question. Yet unless all members are present at every moment of the research process, they will likely experience an uneven distribution of information. Even organizing a remote teleconference to discuss ongoing analysis can prove challenging, resulting in a minimal number of opportunities for coordinated development of ideas.

Fortunately, modern technological capabilities do allow for tools capable of simultaneously fulfilling all four collaborative needs. Dispersed teams of researchers have been using digital tools to collaborate for some time, and the capabilities of such tools have continued to evolve. Qualvu is one example of an internet-based service, geared largely toward data from focus groups, surveys, and self-report video. It allows researchers and clients to access video footage, build context-heavy reports, and manage information sharing, although it does not have a complete collaborative analysis capability. Atlas.ti is a widely used ethnographic tool that is extensively complete for conducting rich analysis on qualitative data and sharing the research process. The only sharing limitations are that users must have the software and be on the same local network. The solution introduced in this paper incorporates these functionalities, but focuses on complete shareability, storage, rigorous analysis, and communication via the internet to directly address the needs of dispersed or remotely operating researchers. This paper will now explore how this type of tool can meet the four key needs of collaborative research, as defined above.

COLLABORATION THROUGH TECHNOLOGICAL INNOVATION

ETHNOKEN is an online visual market intelligence annotation and storage system that directly addresses the collaborative needs of ethnographers as discussed above. Users can upload video content to a secure workstation, sharing access only with authorized team members and clients, and creating a bank of contextual information upon which mutual knowledge can be built, for current and future

projects. By accessing video footage and synchronized transcripts of research sessions that they did not personally attend, viewers can gain direct experience of much of the research context. And through complete access to the analytic process of others, users can get an understanding of the thought processes that led to decisions and insights, either elucidating conclusions or highlighting areas for discussion. This illumination of the thoughts of others aids in the even distribution of knowledge, both contextual and analytic, as well as the coordinated development of analysis. Discussion threads, messaging functions, and the ability to create collaborative report wikis with embedded video further support coordinated communication and development of ideas, with equally distributed power to shape findings and deliverables. Additionally, all research data is stored and organized in a searchable database for future re-harvesting or meta-analysis, with controlled access. Dispersed teams can particularly benefit from access to their archived knowledge on the internet so they can make use of existing data while working away from a central office.

Researchers can conduct analysis using this tool by tagging, coding, and categorizing segments of the video footage and the adjacent synchronized verbatim transcript. Users can first create segments in the video or transcript based on meaningful events or behaviors (tag), then group them into sets by theme (code), and finally categorize this information based on emerging patterns. Users can interpret these coded segments in linked text fields, which are also linked with the chunk of synchronized verbatim transcript. These segments can then be placed into various hierarchically nested, researcher-created categories as patterns emerge among the data, and this process is further aided by an illustrative spatial map of these emerging patterns. Other team members may view these interpretations and categorizations throughout the course of the project, ensuring that knowledge is distributed evenly to the entire team and facilitating access to and communication around developing insights and understandings. This communication can occur through comments and discussion threads, which team members can post to the entire team or address to specific collaborating partners via email. Team members can look at the interpretations linked to video segments and watch the video that led to the interpretations, sharing a full understanding of the partner's thought process.

The online nature of the system allows for constant availability of the project-relevant information to all team members at any time and place, allowing access to research progress in real time. This instantaneous transmission of progress obviates the problem of requiring team members to await meetings or presentations intended for the communication of research developments. Team leaders can manage the client's exposure to research materials through controlled access, carefully guiding the client through the process according to their client communication strategy. As discussed above, there may be advantages and disadvantages to sharing different parts of the process with the client. ETHNOKEN allows team leaders to make and stick to a client communication strategy according to the needs and concerns of each project, with customizable access for each user.

To illustrate how this type of tool can meet the key needs of collaborative ethnographic research, this paper will discuss cases of a hypothetical team collaborating using ETHNOKEN, following the course of a typical project. These use cases will demonstrate how an internet-based tool can address the four key needs of knowledge sharing in collaborative ethnographic research, particularly enabling dispersed or remote teams.

Use case I: sharing the research context.

A research and development project studying behavior relating to mobile applications involves a large team, including project managers, designers, client partners, and others not directly conducting ethnography. Two researchers are working in Tokyo, two are in São Paulo, and two are in Paris, experiencing dramatically different cultural and physical contexts and witnessing different participant behavior. In order to allow direct experience of the context, team members upload the video of their participant sessions while still in the field and each can watch the footage of the sessions they did not attend *before* discussing findings and emerging patterns with the group. The video is synchronized to a verbatim transcript; these are shown side by side to aid understanding and segmentation, or tagging, of footage. When the team meets for regular conference calls to discuss progress and insights, all team members have been exposed to all contexts, and knowledge is distributed evenly. This means they not only have a foundation from which to share further understanding, but are open to potentially surprising insights that are very different from those they saw in their field locations because they were able to witness the participant sessions themselves.

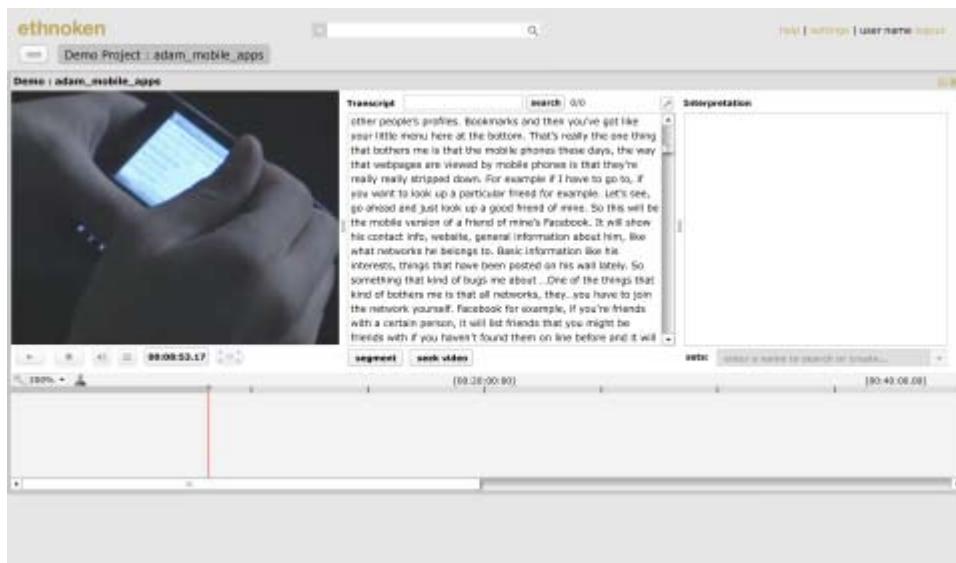


FIGURE 1. The ETHNOKEN editor, with video playback, synchronized verbatim transcript, and interpretation field.

Use case II: sharing reasoning process.

The same team wants to begin analysis and idea development while in the field to keep up with a tight project schedule that leaves no time to waste. Plus, since they are geographically separated and unable to coordinate lengthy face-to-face sessions to discuss their findings, they are susceptible to disagreement and failures in understanding regarding the conclusions reached by team members in the other contexts. Through ETHNOKEN, in addition to watching the video of other participant sessions to gain direct experience of the research context, team members can also access the analytic thought

processes of each researcher, which are recorded in the interpretation field for each coded segment, further ensuring an even distribution of knowledge. Users can look at the current state of the interpretation, with conclusions or claims, as well as all previous revisions, which are saved as the researcher edits and develops her ideas. They can also watch the video linked to the segments or read the automatically linked verbatim transcript, clarifying how the interpretations came out of the data. All team members can have access to the methodological choices and analytical progress of any user who has begun to interpret the data, revealing any knowledge that might be hidden by a different, strictly document-sharing approach to dispersed collaborative analysis.

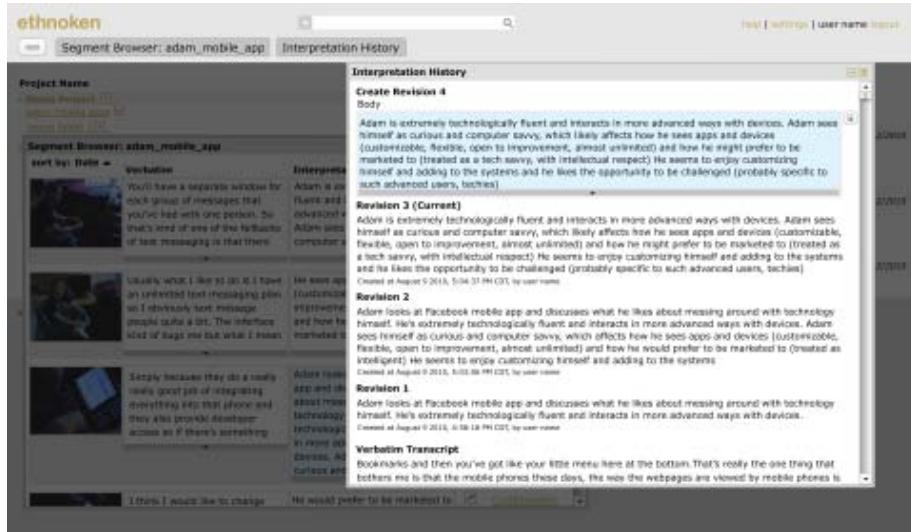


FIGURE 2. Interpretation history, showing all previous revisions of the interpretations of a particular segment.

Each user has a color assigned to his video coding segments so it is clear who is responsible for each idea or piece of analysis, and researchers and other users can quickly leave comments or questions that can be continually followed up.

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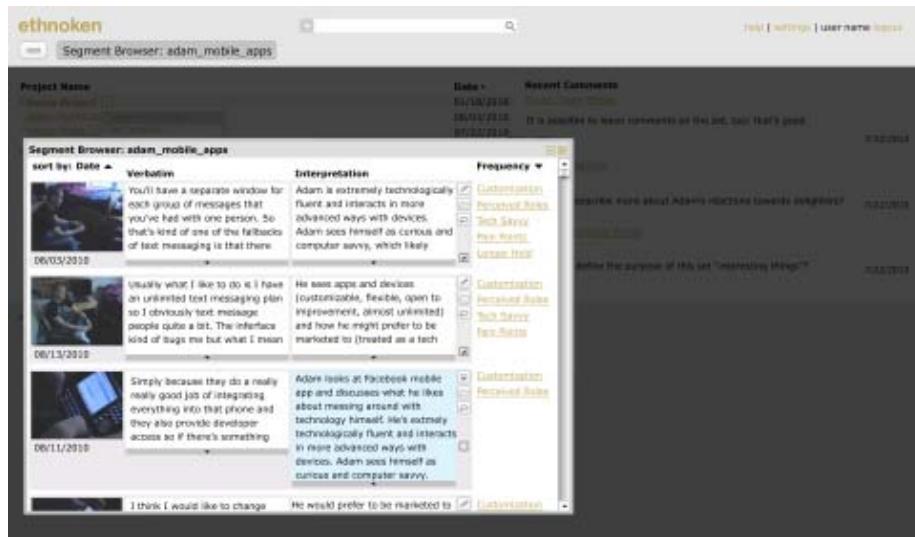


FIGURE 3. ETHNOKEN segment browser, where users can look through segmented and interpreted video segments. Browser is showing video thumbnail, verbatim transcript, and interpretation field, with interpretation open for editing. "Frequency" indicates how many other categorical sets each segment also lives in.

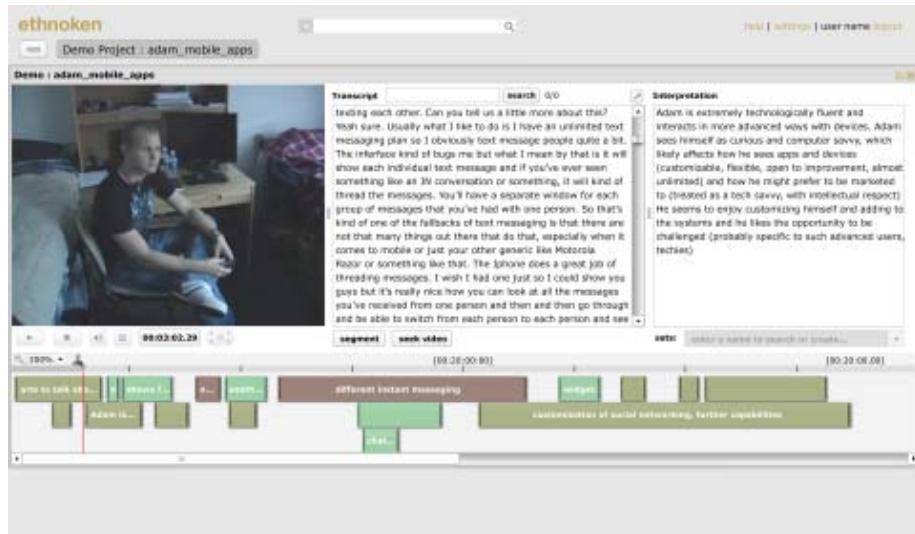


FIGURE 4. ETHNOKEN editor with some completed segmentation, color-coded by user. Clicking on a segment pulls the associated interpretation into the editable field.

Users can collaborate to categorize and assign hierarchy to segments, and check the visual map of their analysis to see how larger patterns are emerging and discuss agreement or ideas on these findings.

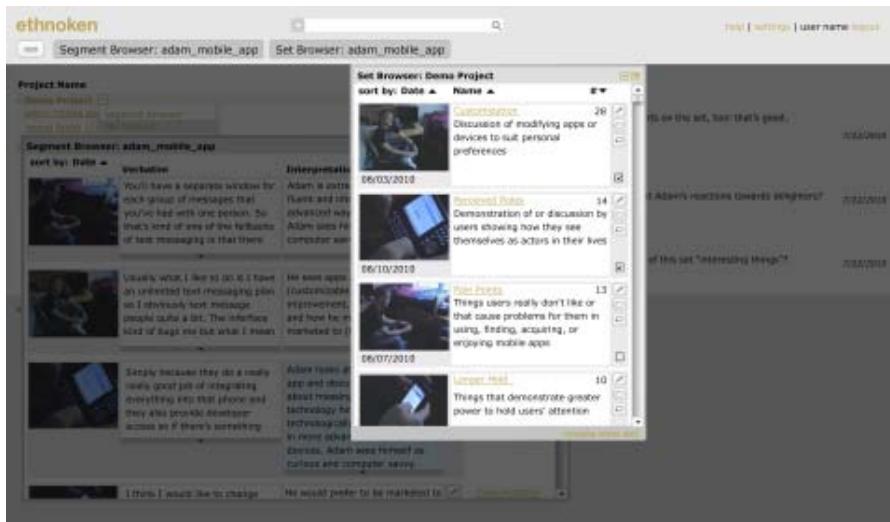


FIGURE 5. Set browser, where users can look through the sets, which are groups of segments tagged and organized by theme.



FIGURE 6. Affinity map, a spatial representation of the relationships between themes. The sets (categorical groups of segments) that contain the most segments are represented as larger and toward the center, and sets that are very intertwined are shown as overlapping.

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The team can remotely build a report wiki, including embedded video and images to serve as the client deliverable, which will keep the process on schedule and fully collaborative even while team members are separated by time zones and miles.

Use case III: guiding the client.

This tool also allows the team to direct the experience and exposure of the client or external partners through controllable access to media files and limitable editing capability. For example, researchers can choose to allow any individual to view video footage only once it has been analyzed, to help guide the client away from drawing conclusions that may be biased by previously held beliefs or organizational orthodoxies. The team can also choose to assign a “read-only” status to such users, allowing them to participate in discussions, make comments, and view selected material, but not permitting them to edit or alter the work. This gives the researchers critical control to manage the amount and timing of exposure client users experience, allowing the team to create and stick to an effective communication strategy, as discussed earlier, to ensure real understanding, cooperation, and effective dissemination of the research.

Use case IV: growing knowledge.

This research team exists within a larger consulting company, and they know that they can answer the client’s research question more quickly and save time and money if they could just access the relevant data from old projects. In ETHNOKEN, the team can search through their entire project history to find answers and topics of interest, profiting from the organized access to the work they’ve already done and avoiding redundancy. The information they find in their old data doesn’t answer all of their questions, but it helps shape the new research question and narrow in on a direction, streamlining the planning and saving time that can be used on increasing the scope of the project. The findings can build on previous knowledge to have a stronger impact than if it had to start from scratch.

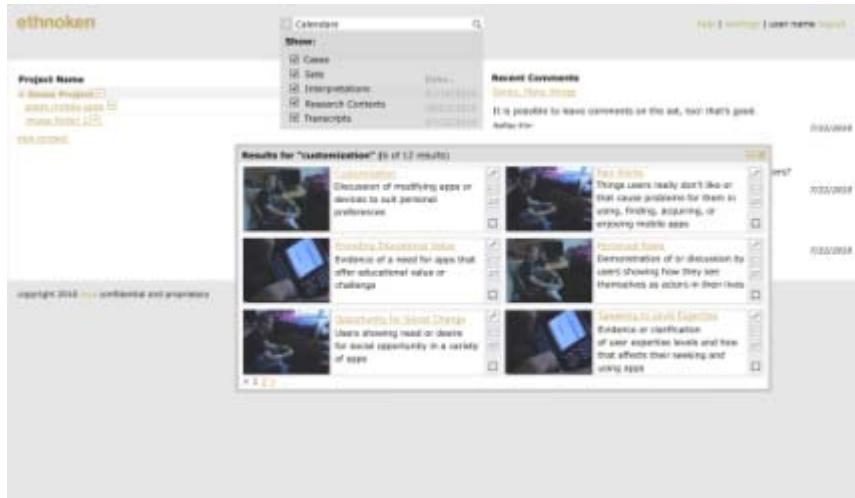


FIGURE 7. Search results, showing the available filters for focusing a broader, cross-project search.

CONCLUSION

Collaborative ethnographic research is a challenge in knowledge sharing, further complicated by the continued need for teams to operate in a dispersed or remote setting. This paper has identified the key needs for effective knowledge sharing in collaborative ethnography in business. It has then shown how a tool that makes use of the internet for storage, communication, and analysis can address these needs to enable the research process and include the client in a way that reinforces understanding and value. Moving forward, our community would benefit from continued exploration into the ways that analysis and knowledge sharing capabilities on the internet can expand the efficiency and quality of dispersed collaboration and offer innovative strategies to involve the client. We must also continue to study and develop the tools of communication within such solutions to address the specific problems of digitally-mediated information exchange. This will ensure that methods of conducting ethnography in business evolve to meet the industry's rapidly evolving communicative demands.

NOTES

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The Best of Both (Virtual) Worlds: Using Ethnography and Computational Tools to Study Online Behavior

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In recent years, many ethnographers have conducted participant observation studies in virtual worlds, whether in games like World of Warcraft or user-generated environments like Second Life. However, the acceptance of digital fieldwork as a legitimate form of ethnography does not make it strictly identical to its physical counterpart. In particular, the logistics of virtual ethnography offer both opportunities and pitfalls that practitioners must address. The virtual nature of the space also compounds traditional issues such as generalizability and coverage. In this paper, we will highlight several interesting opportunities and challenges in conducting ethnography in virtual worlds. Moreover, we will then argue that the common problems shared by quantitative and qualitative social scientists in virtual world research serve to bridge the methodological divide, such that virtual ethnography could be greatly enhanced with the use of computational tools usually more associated with quantitative research methods. We will rely on examples from our own research projects to illustrate the value of such a combination and describe how it could be concretely implemented in a “digital ethnography toolkit.”

THE MERITS AND PITFALLS OF VIRTUAL ETHNOGRAPHY

Through a combination of widely accessible broadband Internet access, fast personal computing technology (in particular, ever faster graphical processing units or GPUs) and the development of increasingly complex software, millions of users worldwide are now participating in persistent, avatar-mediated online environments known as 3D virtual worlds. While many of these online spaces descend from games (e.g. Everquest, World of Warcraft), others offer more open-ended environments (e.g. Second Life). The potential social, cultural, and economic impacts of these spaces have attracted enormous attention in the past decade, but evaluating these impacts remains a core challenge.

Because these environments are persistent and open-ended, they are the site for the accumulation of their users' effort into currencies and items, which quite famously have led to real exchange economies (Castranova, 2003) as well as social relationships (Williams et al., 2006) and new competencies (Malaby, 2006). Moreover, users are beginning to form groups within and beyond these spaces (such as guilds in World of Warcraft), and these new social institutions are developing new kinds of governance and becoming an increasingly important part of their members' social lives (Ducheneaut et al., 2007). As such, the broad scope of human social experience captured by these online spaces makes them possibly the first examples of full-fledged electronic societies, reproducing social and cultural issues not far removed from those of the physical world (Castranova, 2005). Such rapidly changing circumstances call for exploratory, qualitative research, that dimension of social science inquiry best suited for examining social change on the ground. In other words virtual worlds

need ethnographers, much like the earlier unexplored societies that led to the founding of the methodology (Malinowski, 1922).

Ethnographic field research involves the study of groups and people as they go about their everyday lives. The term “participant observation” is often used to characterize this approach, since researchers seek to immerse themselves in others’ worlds in order to grasp what they experience as meaningful and important. Ethnography therefore entails “some amount of genuinely social interaction in the field with the subjects of the study, some direct observation of relevant events [...] and open-endedness in the direction the study takes” (McCall & Simmons, 1969). However, virtual worlds pose a methodological challenge to the ethnographer. Indeed most of this approach is based on the ethnographer “being there” in the field to observe – but this “there” is nebulous at best in the case of online spaces (Rutter & Smith, 2002). This issue of presence (or lack thereof) was the subject of intense debate in the late 1990s as ethnographers began to consider moving into digital spaces. While this debate was raging, the use of “virtual ethnography” remained controversial, and it took several years before it came to be accepted as a legitimate practice. A good summary of the debate can be found in Lyman & Wakeford (1999).

Today a majority of researchers have come to believe in the virtues of “virtual ethnography” (Hine, 2000), that is, an adaptation of traditional ethnography to the study of cyberspace. As Mason (1999) put it:

“A virtual ethnography is one that fully immerses the ethnographer into the consensual reality experienced by groups of people who use computer-mediated communication as their primary, and often only, means of communication. As such, the online or virtual personas of the participants are the main focus of the ethnographer. Generally, researchers have wanted to focus on the person at the keyboard; a virtual ethnography reverses this and works instead with the persona that has been projected into cyberspace by the typist.”

A virtual ethnography is then, simply, an ethnography that treats cyberspace as the ethnographic reality. However, the newly established legitimacy of virtual ethnography does not imply a straightforward transfer of ethnographic practices to the digital realm. Indeed digital environments, with their inherent affordances and constraints, reconfigure demands on qualitative researchers in significant ways. Some of the core logistical challenges include:

- *Coverage:* Virtual worlds abolish many of the constraints imposed on traveling in the physical world since avatars can often “teleport” (or at least move faster than they would if physical constraints were enforced) from one location to the next. They also allow people separated by large physical distances to share the same virtual space. The combination of these two factors makes observing social activities in a group like a World of Warcraft guild quite difficult: at any given time the group’s members might be scattered across the virtual world and moving abruptly across large distances, and a large fraction of the group may also be absent (for instance, European players might be asleep while US players are active). Tracking all the members of a given group therefore becomes close to impossible, since they are not bound to

a common physical gathering point at specific times, as they would be in more traditional ethnographic settings (e.g. a tribe, an organization).

On top of this, social exchanges can take place across a variety of channels, some public, some private: members can “talk” to each other using public chat, semi-private guild chat, or private messages, among others. Directly observing the totality of a group’s activity becomes therefore quite difficult: researchers using traditional participant observation techniques would be able to witness only a small fraction of a virtual world group’s activities, constrained to public interactions taking place while the observer is present in a circumscribed virtual location.

- *Generalizability:* due to their broad appeal and accessibility, virtual worlds are now used by people with widely diverging socio-demographic backgrounds and aspirations (see for instance Williams et al., 2006). As such it becomes difficult, not to say impossible, to conduct a traditional ethnographic study of an entire virtual society: after a time-consuming participant observation in one guild, for instance (which would already suffer from the coverage issues mentioned above), researchers could at best claim to understand only the experience of a fairly circumscribed type of group (say, guilds composed of young adult males focused on large-scale warfare) while many other social units can exist (for instance, a guild composed of family members mostly interested in low-key world exploration conducive to chatting and sociability).
- *Data collection and processing:* accumulating data in virtual worlds can be deceptively easy. Quite often textual interactions can be saved without limits to a researcher’s hard disk, and capturing the entirety of a researcher’s visual experience is feasible thanks to common video capture software. While this can sometimes prove useful (for instance, video logs are necessary for fine-grained conversation analysis – see Moore et al., 2007), the resulting data is more often a deluge of digital content that is hard to process using traditional fieldnote coding techniques (Emerson et al., 1995). Conversely, some new forms of data that ethnographers may not be familiar with are available: in game-like worlds there is information about combat performance (“kills”, damage done, etc.), for instance (Ducheneaut et al., 2006). More generally a lot of a virtual world user’s actions are automatically tracked (e.g. “emotes” such as the number of hugs given, total distance travelled, etc.) but retrieving them might require familiarity with specific software tools.

In spite of the difficulty of processing virtual world data, mentioned above, the abundance of this data has proven a boon to more quantitatively inclined researchers. Indeed, the relative ease of automated data collection and the sheer scale of the resulting data sets have enabled research projects that would have been otherwise infeasible. For instance, it has become possible to reconstruct the social interactions between hundreds of thousands of players from massively multiplayer online games (Ducheneaut et al., 2007). The results of these quantitative analyses, however, could easily be misinterpreted if they were not grounded in qualitative interpretations of the experienced reality of virtual world participants, which is precisely what ethnography is very good at providing. What is needed therefore is a way to combine both approaches and leverage the strengths of quantitative research (in particular, its broad array of tools and techniques for collecting and summarizing large-scale data sets) with the fine-grained, culturally sensitive perspective offered by ethnography.

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This move, to find ways to incorporate technology into the best practices of ethnography, is consistent with one of the core insights of Science and Technology Studies – the mutual influence of tools and people in the course of technological practice. As Andrew Pickering (1995) and others (Latour & Woolgar, 1986) have suggested, the human relationship to technology is one of mutual influence yielding possibilities for innovation only through their contingent combination. Some of this paper's authors have recently explored the possibility of adopting a “technographic” approach by building information visualization tools aimed specifically at assisting ethnographic fieldwork online (Ducheneaut, 2005). The online communities that were the focus of this work (email-supported open source software development), however, were quite simple compared to full-fledged virtual worlds. In this paper, we therefore draw on our practical experience, combining quantitative tools and techniques with ethnography to argue that the study of virtual worlds would greatly benefit from a similar approach.

Rather than a more abstract discussion of the possible intellectual merits of this methodology, which we have already offered in previous work (see again Ducheneaut, 2006 and Ducheneaut, 2003 for an even deeper treatment of the subject), we focus instead on concrete examples from our ongoing study of social dynamics in World of Warcraft, a large game-based virtual world with more than 11 million paying subscribers. By presenting our solutions to the three major logistical issues outlined above, we hope to start a dialog with other practitioners about how it might be possible to experience the best of two worlds (quantitative and qualitative research) that are usually kept apart but have now been given an unprecedented opportunity to join forces in the study of full-fledged virtual societies. In particular, we show how such a hybrid, qualitative-quantitative approach can be put to task in the form of a “digital ethnography toolkit,” that is, analytical software tools designed specifically to support digital fieldwork. We use the example of one such tool we developed, the Social Dashboard, to illustrate how this approach can provide concrete solutions to important business problems such as customer retention and targeted marketing.

FIRST OBSTACLE: GENERALIZABILITY

We define generalizability as the degree to which a given set of findings reflect characteristics of the population sampled as a whole. Generalizability has always been a challenge in applying ethnographic methods due to the high cost and localized scope of participant observations. It is often difficult to assess or provide a sense of how generalizable ethnographic findings are outside of the observed sample (LeCompte & Goetz, 1982). But virtual worlds provide the opportunity to assess the generalizability of ethnographic findings because many social metrics are tracked automatically by these environments. For example, after conducting an ethnography of both a 10-person guild and a 25-person guild on one server in the online game World of Warcraft, it is possible to reference the companion site Armory (<http://wowarmory.com>) to calculate the average guild size on that server, as well as the average guild sizes across servers. Knowing how typical or atypical the sizes of the observed guilds are allows ethnographers to better estimate how their findings may or may not generalize to other guilds.

The problem here is that this data is most often not available in a synthetic format highlighting the most relevant variables for a given ethnographic project. In the context of our study of the social

dynamics of groups in virtual worlds we developed a suite of tools, the “Social Dashboard” (Ducheneaut et al., 2007), to summarize these high-level social metrics in order to guide ethnographers toward the best and most generalizable participant-observation sites. We used this tool in a recent study of guilds in World of Warcraft (Williams et al., 2006), where we first mapped out the range of guild sizes in the game and selected representative guilds that fell along the spectrum. We also selected particular individuals in those guilds to cover a range of social network metric variances: people who were well-connected, people who recently joined, etc. This information was then conveyed to our fieldworkers who conducted in-depth interviews with those individuals. Thanks to this approach, a small team of qualitative researchers (we deployed only two ethnographers in the game world) was able to collect highly generalizable data since we were confident they had interacted with the full-range of group types present in this virtual world.

SECOND OBSTACLE: COVERAGE

We define coverage as the ability to be in many places at the same time, as well as the ability to quickly spot and observe low occurrence events wherever and whenever they occur. Virtual worlds also provide unique advantages in studying these low-occurrence or highly unpredictable events, such as an organization splintering or loss of a central member in a large group. This is because it is possible to instrument virtual worlds to monitor active groups and alert researchers to these events in real-time. In other words, computational tools can be used to track and flag the “key events” (Fetterman, 1998) that are essential in ethnographic practice. This way, ethnographers can track several sites in parallel, greatly reducing the time between critical incidents and therefore generating more useful observations in less time.

The same is also true for being able to monitor interesting events at the individual level that are impossible to schedule ahead of time. For example, after enlisting a cohort of individual players into a study, it is possible to monitor their characters in real-time for specific triggers of interest, such as: when they leave or join a guild, when they enter a large 25-person raid for the first time, or when they become a central member of a guild. Thus, instead of following individual players around and waiting for these events of interest to occur, a researcher could use a real-time monitoring tool and be alerted when their triggers of interest occur and they could, quite literally, beam themselves right next to their participants as the scenario unfolds or initiate an interview.

The “Social Dashboard” described above was also developed to address this need. Researchers first define the “key event” of interest – in our case, the death of a guild due to progressive loss of its entire membership. Based on the data accumulated to this point, the software then attempts to compute the best possible model of which available variables contribute to the event. In our case for instance, the size of a guild, its fragmentation (the number of cohesive subgroups), and its density (how interconnected the members are) all seemed to play a role in the guild’s eventual survival. The software then highlights these key variables (Fig. 1) and lets researchers find groups that are nearing the key event of interest (here, a guild’s disappearance – see Fig. 2). This way, researchers can quickly spot groups of interest across the entire virtual world and log into the world *before* the event occurs, giving them the opportunity to observe it and interact with the users to understand how the situation came about (something that the numbers alone cannot reveal).

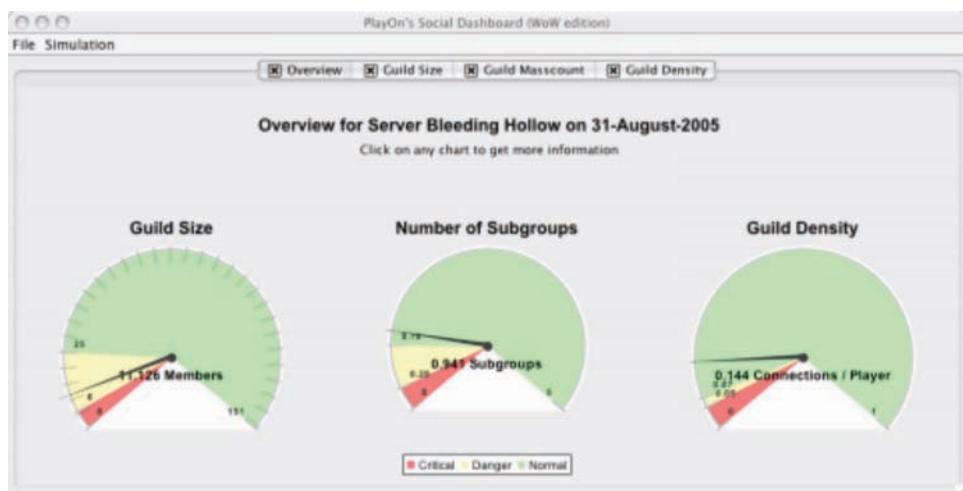


FIGURE 1 – THE SOCIAL DASHBOARD’S MAIN SCREEN. Here the key even of interest is guild death, and the software is tracking three high level variables that appear to contribute to the event.

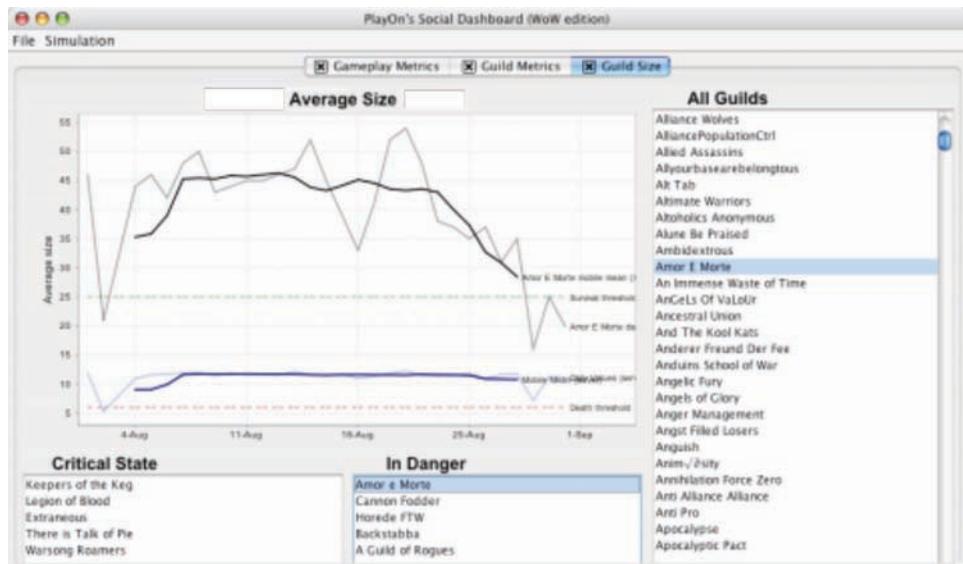


FIGURE 2 – THE TRACKING SCREEN ALLOWS RESEARCHERS TO SPOT A KEY EVENT BEFORE IT OCCURS. Here the guild “Amor E Morte” is collapsing (its size has gone below the model’s survival threshold) but has not totally disbanded yet. Researchers can immediately log into the virtual world to interact with the guild members and understand the root causes of the group’s problems.

THIRD OBSTACLE: THE DATA DELUGE

We have illustrated above how the development of custom software, the “Social Dashboard”, helped us leverage the strengths of quantitative research (quickly processing large data sets, visually representing norms and trends, modeling events) to guide the work of ethnographers such that their analyses do not suffer from the traditional problems of coverage and generalizability. This software, however, was tailored to the analysis of group dynamics since it was the main research issue we were investigating. As such, it only processed a small fraction of the deluge of data potentially available to guide ethnographers. Still, we believe some key components of our approach could be re-used in a much wider range of research projects, giving rise to the possibility of a “virtual ethnography toolkit” to support online fieldwork.

The core of our approach relies on having as many virtual “boots on the ground” to compensate for the inability of an ethnographer to be in several places at once. In virtual worlds, this means creating “robots”, that is, avatars controlled by a machine for the sole purpose of recording activities in the world. Each robot then needs to 1) cycle through virtual observation sites of interest such that data is collected frequently enough to spot key events and 2) record data in a format suitable for visualization and the guidance of ethnographers.

While each game/virtual world is based on different avatar systems, the high-level logic of creating as many robots as needed and cycling them through observation sites is independent of the environment being studied. As such, the first component of a virtual ethnography toolkit should be a kind of “control tower” supervising the robots’ activities. We have implemented (and currently use for an on-going project) such a piece of software in the Java programming language. Our software can launch an arbitrarily large collection of virtual machines (that is, independent copies of Windows and whatever virtual world is being studied) and orchestrate their activities to optimize data collection (for instance, given 10 World of Warcraft accounts, the software would spawn 10 virtual machines and assign 28 game servers to observe to each of them, thereby covering the entire US gaming population since Blizzard Entertainment currently runs 280 servers there). The software is designed such that each virtual machine could contain any other virtual world (say, Second Life or Everquest, for instance): the only additional software engineering required would be the in-world scripts tasked with recording the data.

Moreover, the “control tower” was also designed to extract and process the data collected in-world whenever a robot is cycling out of a given server. Provided the in-world scripts mentioned above conform to our software’s application programming interface (API – in other words, a set of conventions about how the data should be formatted), data can be processed whatever the source might be. The combination of environment-independent control logic and common data formats can greatly speed up deployment across a wide variety of current and future virtual worlds.

As we illustrated earlier with the Social Dashboard, a virtual ethnography toolkit should eventually allow ethnographers to visualize high-level events in order to guide their activities. Visualizing the raw data, however, is often pointless: our WoW robots, for instance, simply record who is online at a given

PIONEERING THE PATH

time. This data becomes interesting only when pre-processed with the following heuristic: if two players from the same guild are online at the same time and in the same game zone, then they are playing together. This translates into a social network graph connecting players who usually play together, which in turn can be processed to reveal interesting properties of the group (e.g. how centralized it is, or how fragmented, etc.). We use this detailed example to illustrate the importance of a second component of the ethnography toolkit, preceding visualization: an intermediate layer mapping raw data to higher-level concepts of interest. This could be implemented using simple user interface techniques, such that no further software engineering is required. For instance, users could see a list of raw variables and be allowed to “pile” them into higher-level aggregates using simple drag-and-drop. Or users could create simple flow diagrams connecting relevant pieces of information. Whatever the approach, the goal is to translate the raw data into meaningful concepts without having to learn complex programming and/or data processing languages. We note that, in our current prototype, this mapping is hardcoded: the development of compelling user interfaces for the middle layer of the ethnography toolkit presents an interesting opportunity for further development.

Finally, the data should be visualized to reveal trends of interest. Here we simply rely on the many open-source Java libraries dedicated to data visualization. For instance, Mondrian (<http://rosuda.org/mondrian/>) offers compelling visualizations for general-purpose statistics (barcharts, scatter plots, etc.). JUNG (<http://jung.sourceforge.net/>) and Prefuse (<http://prefuse.org/>) can be used to visualize social networks. The third component of the ethnography toolkit is therefore a kind of glue allowing ethnographers to select a set of high-level variables and the type of graphs they would like to use. As we did in the Social Dashboard, it is also possible to automate the process further: for instance, automatically analyze the data with machine learning techniques (WEKA from <http://www.cs.waikato.ac.nz/ml/weka/> is an open-source, Java-based solution we have used) and isolate trends of interest, which can then be visualized using a graph of the proper type as determined by the ethnography toolkit (e.g. use line graphs to map trends, pie charts for distributions, etc.).

USING THE DIGITAL ETHNOGRAPHY TOOLKIT TO SOLVE BUSINESS PROBLEMS

A general-purpose digital ethnography toolkit and the variety of environment-specific tools it enables, such as the Social Dashboard, has benefits extending beyond research projects. Indeed, businesses dealing with online communities of any type (from guilds in World of Warcraft to customers exchanging reviews on Amazon.com) have long recognized the need to understand these customers better in order to respond to their demands more efficiently and in a timely manner. More often than not however, this translates into manpower-intensive customer relationship management, whereby many employees (often hundreds, if not thousands) are tasked with “keeping a finger on the pulse” of the community by reading their comments, interacting with them live (in a 3D virtual environment or other electronic settings, like a chat room), or inviting them to participate in activities like focus groups. Note how similar the problems faced by these community managers are to those of digital ethnographers: they are both trying to cover a lot of virtual ground (an entire digital community) to spot events representative of broader trends that they can analyze more finely (in one case, to confirm/inform a research question; in the other, to adjust marketing activities and fine-tune a business’ offerings). In fact, it is reasonable to argue that for Internet businesses, customer relationship

management is a form of digital ethnography – the only way to understand a community is to be a part of it and observe ever-shifting moods and trends. As such, we believe that the approach we outlined in this paper could be used to solve concrete business problems – we illustrate how with two recent examples from our own work: customer retention and targeted marketing.

The users of virtual worlds (either game-based or more generic) often state that “it is the people that are addictive, not the [environment]” (Lazzaro, 2004). Accordingly, the designers of online social spaces have recognized the importance of such a “people factor” and create environments encouraging social interactions as much as possible. For instance, quests in World of Warcraft’s many dungeons (instances) are purposefully designed to be too difficult to complete alone: players need to form groups of five to tackle them and progress, thereby creating opportunities for longer-lasting social bonds (Ducheneaut et al., 2006b). But if creating such bonds increases the environment’s “stickiness” and promotes increased usage, it is logical that, conversely, the disappearance of the same bonds makes the environment less compelling and might lead to users eventually leaving it altogether. Therefore, monitoring sociability and interactions in groups can be a powerful way to predict whether or not a given customer will remain engaged for the foreseeable future or defect to another online space. Engaging with customers about to defect can help identify the root causes of their dissatisfaction and which might be remedied with incentives for them to stay (which is all the more important if the customer plays a central social role in their group and their defection would cascade into several more). Note how both automated approaches (monitoring interactions across thousands of groups) and qualitative ones (interacting with key customers to adjust marketing actions) are needed: tools like the Social Dashboard were designed with exactly such a hybrid approach in mind and could, therefore, greatly facilitate customer relationship management in large online spaces where social activities are key to a business’s survival.

Efficient marketing also often depends on properly categorizing customers into “segments” with different needs and aspirations. Focus groups have historically been the tool of choice for such segmentation, with customers from different socio-demographic backgrounds being invited to discuss issues important to a business and how it might go about offering possible solutions. We believe that, in online spaces, the use of tools like the Social Dashboard can make such segmenting more straightforward and reliable. In a way, the approach is the reverse of the one described above. Instead of starting with high-level data analysis and monitoring, followed by ethnographic participant observation to uncover the root causes of an issue, businesses interested in refining their marketing segments might start here with digital ethnographic fieldwork to identify individuals in their community with interesting profiles (these vary greatly depending on the business and must be locally defined – to use a concrete example, interesting profiles in World of Warcraft could be players who seem to be very vocal in public chat and might influence opinions, assuming they get positive reactions from the community). The activity traces of these individuals can then be used in the Social Dashboard to see if they are representative of a larger group. This way, it is very easy to quickly see if interesting individuals are representative of a market segment that can be approached with a custom message, or if they are simply idiosyncratic and can be safely ignored. Such an approach therefore enables targeted marketing that is both responsive to newly emerging segments identified during fieldwork and more fine-grained than had been previously possible.

ETHICAL CONCERNS

Before concluding this paper, we believe it is important to spend some time discussing the ethical implications of the approaches we discussed. While the affordances of virtual worlds provide unique opportunities for conducting research, they also create unique problems with regard to university IRBs as it is often unclear how specific rules and definitions rooted in the physical world translate to virtual settings. The scale and scope of data collected with an automated toolkit such as the one described above also introduces ethical concerns that “regular” ethnographies may not usually have to face. Here, we briefly note several problems to foreground these potential IRB concerns for other researchers.

Minors are a separate class of human subjects in the eyes of the IRB and require parental permission in addition to assent from the minor, in lieu of the standard informed consent. The problem is that it is difficult, if not impossible, to validate parental status or age in cyberspace (i.e., the minor could just lie and say they are 18 or above to begin with). On the other hand, there is a reasonable argument to be made about waiving certain standard requirements given the minimal risk nature of most social science studies and the impracticality of conducting such research otherwise. This, however, depends on the mindset of the local IRB members. We also note that online games and virtual worlds have historically been the province of mostly young users, which explains the IRBs’ particular scrutiny of how underage participants are handled by researchers. However, it is important to note that the demographics of virtual worlds users has broadened immensely in the past decade (Williams et al., 2008) and now includes a large majority of adults (including female users, which historically were extremely under-represented). The natural evolution of the population in virtual worlds might therefore mitigate the issue of age and eventually reduce (but certainly not eliminate) the need for additional monitoring by IRBs.

Another provocative set of issues arises related to whether virtual worlds are public spaces. Under IRB rules, a study is exempt from review if it collects passive, observational data in a public space without personal identifiers. The difference between the physical and virtual world is that the latter comes perfectly instrumented (or that it can easily be instrumented, as we proposed earlier). It is possible to collect behavioral data from every avatar in a virtual world continuously, in a way that would be impossible to do in the physical world. However, it is also possible to use techniques (such as one-way hashes) to anonymize character names as the data is being recorded. While IRBs would have no privacy issues about recording people at crosswalks using hidden cameras, it is an entirely different issue when the hidden cameras are used to record people in their own private homes, even if the footage were later anonymized. The core question is therefore what reasonable expectations of privacy users of virtual worlds have, and whether a multi-user avatar space like World of Warcraft is more like a crosswalk or a living room.

This problem is compounded by the relatively recent practice of game developers to make public what would otherwise be private data. A good example would be Blizzard’s Armory, mentioned earlier. This raises the possibility of, for example, an employer making judgments of an employee based on the latter’s frequent WoW gaming as documented on the Armory. This would be like Facebook status updates that are automatically generated for you and which you cannot edit or hide. But, given that this information is now in the public domain, can it still be considered private in any sense? And as such,

should specific safeguards be enforced by IRBs when researchers make use of this data to guide their observations?

The affordances of virtual worlds are strange in that the lack of validated identity makes certain IRB rules difficult to abide by, but at the same time, the public and panoptic nature of digital systems seems to have created loopholes in our traditional notions of privacy grounded in physical reality. Much of the recent research in virtual worlds has shown that people are heavily invested in their online identity and many social norms carry into these virtual environments. The key question is this: in what ways is analyzing hidden camera data from virtual worlds different from analyzing hidden camera data from people's living rooms? If ethnographic research online is to benefit from the guidance provided by large-scale, automated data collection tools, then ethnographers will have to grapple with this question first-hand instead of obtaining consent from a limited set of well-known participants as is usually the case in the physical world.

CONCLUSION

We have argued in this paper that the emergence and ever-increasing popularity of large, multi-user virtual worlds presents an opportunity for ethnographers and more quantitatively-inclined researchers to collaborate in ways that were not previously possible. Indeed, the affordances of virtual worlds provide the perfect bridge for quantitative and qualitative researchers. The ability to track and monitor data at both individual and server levels provides a way for mixed-methods team members to complement each other's research. The quantitative team can help identify representative individuals or groups for the qualitative team and the qualitative team can help provide ethnographic explanations for high-level differences identified by the quantitative team.

Moreover, such collaboration does not have to be ad hoc and constantly re-negotiated: our own experience studying virtual worlds shows that the high-level practices necessary for mixed-methods teams to collaborate can be encoded into a "digital ethnography toolkit" that concretely enforces important data collection and analysis techniques, such as: easily deploying an arbitrarily large number of "boots on the ground" (that is, digital robots collecting data directly in the virtual world) and synchronizing their activities; mapping from low-level observations to higher-level, meaningful concepts – guided by the intuition of the ethnographers and the requirements of a given research project; and finally being able to easily observe, at-a-glance, patterns in these concepts and their evolution over time using compelling visualizations. While we have made progress in this direction and implemented some of these steps in our own software, many opportunities remain for further research and development in this area of computer-supported ethnography. We believe, however, that such an approach already has potential for solving concrete business problems: we illustrated the possible benefits in two areas, namely, customer retention and targeted marketing.

While opportunities abound, we also took pain to emphasize that the newfound ease of data collection and analysis offered by an ethnography toolkit is not without ethical risks that practitioners of more "classic" ethnography may not have encountered before. Ethnographers will need to carefully consider the impact of panoptic data collection on their participants before unleashing the full potential of the new tools at their disposal.

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Living Avatars Network: Fusing traditional and innovative ethnographic methods through a real-time mobile video service

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This paper presents a study of new technologies potentially enabling access to a sensory feast of places by ‘wired up’ flâneurs, real-time as well as remote ‘native’ description and interactions and situated oral histories excavated through ‘being in a place’. We describe an inter-disciplinary research project examining the cultural heritage of Singapore and the use of geo-location technologies incorporating social networking platforms as a medium for interactive heritage walks. The goal of the project is to engage both locals and non-locals in experiencing Singapore from a first person perspective, giving them a wider understanding of the ethnic and cultural diversity. The Living Avatar Network (LAN) supports sharing experiences and realities in real time through making it possible to ‘walk in someone’s shoes’ through a living avatar, re-experiencing someone’s memories of a certain place. Here we describe the approaches deployed in evolving a prototypical service - ‘traditional’ ethnographic style methods with the access to the real-time, lived character of ‘local’ experiences offered by digital photo streams and real-time video. More broadly, the project acknowledges the potential availability of the experience of being in a place and culture to be widely available through Web 2.0 technologies and people spending more time ‘living digitally’.

“Sight may be viewed as the most superficial of the senses getting in the way of real experiences that should involve the other senses and necessitate long periods of time in order for proper immersion...”
Urry (2002:149)

INTRODUCTION: LOCAL CULTURE IN A GLOBAL, DIGITAL WORLD

Modern mobilities, such as physical and virtual mobilities (Urry, 2000), and encroaching globalisation promote the increasing jumble and homogenisation of disparate cultures in local settings. In a global city like Singapore there is tension between the lived history and reality of particular places and practices and the rush to feed and globalise “the tourist gaze” (Urry, 2002). Singapore is an ideal place to explore interactions between the emerging technologies, globalisation and the disappearing traditions because cultural heritage, like in many global, cosmopolitan cities, is a contested zone. Various interests, such as tourism marketing campaigns and the construction of a multicultural identity, compete over the function and the definition of the collective and personal past. How can memories and experiences be preserved in a city that is changing rapidly? How can the disappearing, even forgotten, past and the omnipresent future be reconciled?

These observations and questions point to a number of tensions, tensions that we wish to explore through this paper. On one hand there are tensions between performing and preserving particular

aspects of everyday life. On the other hand there are aligned tensions between preserving aspects of ‘culture’ and external forces such as modernization, development and globalization. Urry (2002) points to the growth of “tourism reflexivity” or “identifying a particular place’s location with the contours of geography, history and culture that swirl the globe, and in particular identifying that place’s actual and potential material and semiotic resources.” In such a climate and with the rapid development of “communicative mobilities” and “corporeal travel” there are vast opportunities to both develop and mobilize “the tourist gaze”. This ‘reinvention and mobilisation’ can involve different individuals’ and groups’ localized heritage through personal auditory and visual narratives.

Developing appropriately relevant and rigorous methods that support both policy (e.g. tourism policies) and design (e.g. emergent services) decisions is challenging. Our focus here is on design, but not the kind of design that is typically labeled “creative design” or “engineering design” (Vetting Wolf et al., 2006). In our treatment of design we acknowledge the explosion of technologies and interfaces into multifarious aspects of people’s lives (Bowers and Rodden, 1993). We thus widen the ‘traditional’ notion to include e.g. assembling existing services in new ways. Thus, in this paper we examine the kind of ‘everyday design’ that is similar to the experience of the proficient home user or developer confronted with developing a ‘proof of concept’ or ‘demo’ or even simply ‘getting the job done’. In our treatment of ‘design’ we also recognize the convergence between content and service creation and publishing through Web 2.0 technologies, where: the development of a prototypical service may involve little more than the innovative assembly of existing services; the time between this assembly and launch may be short and; the potential for accessing a large audience quickly, who can, in turn, reinvent the service, is considerable.

In some ways ethnography and cultural heritage have similar goals: they are concerned with ‘the authentic’; they wish to represent this authenticity in some way; they have similar preoccupations with notions of place, artifacts and representation; both recognize the importance of experience; both are concerned with how to treat data (e.g. documents, photographs etc) and what to make of them. As Urry (2002:157) notes regarding tourism:

“Culture-developing-and-sustaining-travel can take on a number of different forms: travel to the culture’s sacred sites; to the location of central written or visual texts; to places where key events took place; to see particularly noteworthy individuals or their documentary record; and to view other cultures so as to reinforce one’s own cultural attachments.”

Thus separating the methods we report on and the focus of the research is somewhat artificial. However, heritage has a concern with preservation and display while ethnography’s prime concern is the investigation of local culture, wherever that locality may be and whoever might be engaged in the activities comprising that culture. Thus the questions we wish to answer here concern digital technologies supporting heritage activities, how to deploy these tools to understand the experience of those activities and the broader implications of these technologies for an understanding of heritage in a post-modern era suffused with different mobilities.

The specific work we report on here was part of an inter-disciplinary research project into the cultural heritage of Singapore and the use of geo-location technologies incorporating social networking

platforms as a medium for interactive heritage walks. The goals of the project were to engage both locals and non-locals in experiencing Singapore from a first person perspective, giving them a wider understanding of the ethnic and cultural diversity, through interactive heritage walks. The project has also explored opportunities and challenges for new ways of probing, sharing and promoting local ‘culture’. The focus of this paper is reporting on the development of a prototypical service with a view to drawing out lessons for new ethnographies that combine ‘traditional’ and ‘new’ methods and deploy ‘digital life documents’ (Plummer, 1983) or, in Crabtree et al.’s (2006) terms, ‘digital records’. What we suggest is that both the methods and new services we present here, offer new opportunities for exploring social life.

THE LIVING AVATAR NETWORK

The concept of the Living Avatar Network (LAN) was developed through qualitative enquiry and reference to popular culture (e.g. “Avatar”, “Surrogates”), actual services (e.g. BBC News, 2009) such as ‘Rent-a-friend’ in Japan, and an art project on remote control (Silver and Rivrud, 2007). Popular culture, and science fiction in particular, inspired the idea that another body, appropriately connected with, can act as a proxy for experience while the phenomenon of being able to rent friends, relatives and even partners to ‘stand in’ for important others in one’s life suggested the potential commodification of such a body’s time. Silver and Rivrud’s art project, deploying similar technologies to those used here (<http://girlfriend.mediamatic.net/>), probed the mechanics of the relationship between a controller and a controlled avatar via performances. LAN drew on each of these to support sharing experiences and realities in real-time through making it possible to ‘walk in someone’s shoes’ via a living avatar, (re-)experiencing memories of a certain place. These ‘memories’ could be variously evoked and communicated, depending on the nature of the avatar-controller experience. The team (‘the team’) that developed the LAN concept comprised five students and two academic staff (one of the authors and another staff member) from the National University of Singapore. The second author periodically interacted with the team advising them on and answering questions.

The LAN concept developed by the team is quite simple: one person or group in a place being directly engaging with (e.g. through walking), ‘the avatar’, interacts with another person or group beyond that place, ‘the guide’, through the avatar using what we term ‘mobile interaction technologies’. Important features of these technologies are that they: are portable; allow the collection and sharing of experiences through, for example, video or audio recording; deploy wireless communication technologies (e.g. WiFi, 3G); utilize publicly available infrastructure (e.g. cloud computing) and; deploy particular recent, freely available real-time services (e.g. Skype). Thus, although we term these technologies ‘mobile interaction’ they also support real-time broadcasting to a potentially huge public. Clearly ‘the avatar’ is not simply a dumb automaton being steered by the guide - the relationship is more egalitarian and reciprocal than that and may also vary depending on the situation and individuals involved. For instance, the avatar may be re-experiencing a place for someone else who is guiding him/her while also experiencing a place for the first time.

One situation the team discussed involved a local, because her work tied her to a particular location, guiding a visitor around Singapore through mobile interaction technologies. In this case, the avatar’s experience is the primary motivation for and in the interaction. One particular scenario

(Cooper, 1999) developed the relationship between the avatar and the guide further. This scenario (Wickrama, 2010) described a wheelchair bound Singaporean staying in another country vicariously visiting places (e.g. a location from childhood), performing activities (e.g. exercising) and even tasting local food through an avatar. In this case, the guide's experience is the primary motivation for and in the interaction. The team's vision extended beyond the particular trial described in this paper. They suggested LAN, if developed as a new Internet service, could encourage users "to exchange, volunteer or simply buy and outsource experiences and realities in real-time" (Wickrama, 2010) while walking around a specific location. Thus the idea, not unlike online relationships, could be extended to support people offering themselves as avatars (e.g. via the Internet) for someone they could connect with over a distance in order to share interesting stories, experiences and ideas in a novel setting.

CULTURAL HERITAGE AND NEW AND EMERGING TECHNOLOGIES

"Questions of heritage, even where there is commodification of history, makes 'history' central to the nature of given cultures and demonstrates that heritage cannot be divorced from the various 'techniques of remembering', many of which now involve tourist sites, festivals, events and so on..." (Urry, 2002:159)

Notions of nationhood and heritage are now closely linked - what to choose to preserve and put on display is at least partly determined by national priorities. Stretching back to the 1851 National Exhibition in Crystal Palace, London, particular "travel to sites, texts, exhibitions, buildings, landscapes, restaurants and achievements of a society has developed the cultural sense of a national imagined presence" (Urry, 2002:158). Yet it is important to acknowledge the impact and importance of informal, unofficial narratives and stories with the increasing ubiquity of global travel, 'global diasporas' (Urry, 2002:159) and global personal connectivities to others. VFR (Visiting Friends and Relatives), health and religious travel accounted for 27% of all inbound travel in 2006 (UNWTO, 2007) or 225 million international arrivals, compared with 154 million in 2001 and 74 million in 1990. Urry (2002:159) cites examples of huge Trinidadian, Chinese and Brazilian diasporas and how diasporic travel "has no clear temporal boundaries" as being 'home' and 'away' tend to merge into each other. Larsen et al.'s (2006) recent empirical study of working people's mobility in the Northwest of England shows how 24 informants, ranging from architects (nine) to porters and doormen (six) sustained regular telephone contact (at least one phone call every ten days on average) with people living over 250 km away. Thus nomadism seems integral to today's age (Makimoto and Manners, 1997) with an increasing number of hybrid connections maintained through "inhabiting machines" such as mobile phones that "reconfigure humans both as physically moving bodies and as bits of mobile information and image, with individuals existing both through, and beyond, their mobile bodies" (Urry, 2004:35). Through these 'machines' "connections are crucially transformed, with others being uncannily present and absent, here and there, near and distant, home and away, proximate and distant" (ibid).

A useful way of viewing experiences through LAN is through Urry's (2002) notion of "the tourist gaze". Although directed at understanding the consumption of places by people engaged in tourism and not cultural heritage, it does offer insights because it considers how people experience what is put on display in particular places. It also represents the interaction, conflict and tension between the consumer and the provider of the experience and the autonomy of the individual when approaching a

place. As such the notion of the tourist gaze has both resonances and dissonances with the experience proffered through LAN. Both are primarily aimed at leisure as opposed to work, arise from movements and stays in new places, involve short-term or temporary experiences, focus on visual experiences, can be anticipated and even constructed and sustained through non-tourist practices (e.g. watching TV). Both are also, to some extent, determined by a series of external factors such as “changing class, gender, generational distinctions of taste within the population of visitors” (Urry, 2002:3). However, the kinds of experiences supported through LAN differ because they are more individual in character and less mass-produced and, thus far, less subject to competition. LAN experiences are also, despite involving the lingering over particular aspects of places typical of the tourist gaze, more ‘in the moment’ and less subject to the pressures of immediate reproduction and capture through visual artifacts and technologies because the network, via real-time data capture, can potentially support exactly this. The mediated experiences need not be ‘out of the ordinary’ but, instead, may simply be ordinary and everyday. The gaze offered by LAN is less constructed through signs than personal memories and past experiences. As such the kinds of less commodified and mass-produced views offered through LAN offer distinct opportunities for ethnographers to uncover current and even past practices ‘from within’.

Our tentative suggestion then is not only that there are other narratives relevant to heritage than ‘the party line’ but also that there are other ways of investigating and preserving culture than those privileging “the visual”. Urry (2002), at the end of his book, admits as much, recognizing “the tourist gaze’s” emphasis on the visual. Recent developments in the role of walking in ethnographic practice (e.g. Pink et al., 2010) and “sensory ethnography” (e.g. Pink, 2009) point to the importance of recognizing and exploiting the observer’s physical engagement with and presence in multiple facets of a place for ethnographic methodologies. The latter aspect of sensory ethnography acknowledges the reflexivity of ethnographic encounters and argues for multiple ways of knowing beyond ‘classic’ observation. Pink (2009:15) describes how recent sensory ethnographies have shifted from focusing on different cultures to considering aspects of everyday life: “Such sensory ethnographies both attend to and interpret the experiential, individual, idiosyncratic and contextual nature of research participants’ sensory practices *and* also seek to comprehend the culturally specific categories, conventions, moralities and knowledge that informs how people understand their experiences.” (Pink, 2009:15). Pink et al (2010:3), drawing on Ingold’s work (e.g. Ingold, 2007), note the importance of “the recognition that walking is...in itself a form of engagement integral to our perception of an environment” as well as something that can be learned and a means of communication and knowing.

Bruce Chatwin in “Songlines” (1987), points to some of these concerns, describing how Australian aborigines couple traditional songs and stories with places to the extent that they can be used to navigate the continent. Oral history or “spoken memories and personal commentaries of historical significance through recorded interviews” (Ritchie, 1995:1) is recognized as a ‘heritage genre’ or “cluster of genres” (Portelli, 1998). Ritchie’s (*ibid*) notion of oral history emphasises the act of transcription, archiving and presentation of the resulting material. Yow (1994:94), on the other hand, stresses the importance of the relationship between the listener and the narrator and how the listener is ‘placed’: “there is someone else involved who inspires the narrator to begin the act of remembering, jogs memory, and records and presents the narrator’s words”. Plummer (2001:28) also emphasizes the role of the listener in gathering “researched and solicited stories” that “do not naturalistically occur in

everyday life...they have to be seduced, coaxed and interrogated out of subjects". Crabtree et al. (2006) have developed 'life documents' through 'the digital record' or the "natural extension and evolution of the ethnographic record, where technologies of production have progressed over time from paper and fieldnotes to incorporate a veritable host of new computational media to record social life" (*ibid*:284). In such a view new, ubiquitous and emerging technologies proffer insights into the situated character of social interaction in a way that is mutually supportive of 'traditional' ethnographic approaches.

While LAN has the potential to respond to the challenges of sensory ethnography (Pink, 2006; 2009) and generate various kinds of life histories, it also, in more traditionally ethnographic parlance, offers potential for embracing both the senses and "direct and sustained contact with human agents, within their daily lives (and cultures)..." (O'Reilly, 2005:3). Key distinguishing features of the LAN network then are its ability to leverage the individual, personal knowledge and motivations of the non-professional guide. The suggestion here is that 'the personal' is being connected to 'the cultural' and that there is at least the potential for autobiographical accounts that "self-consciously explore the interplay between the introspective, personally engaged self with cultural descriptions mediated through language, history and ethnographic explanations" (Ellis and Bochner, 2000:742). The portability of mobile technologies deployed also supports the engagement of all the senses. As Urry (2002:146) points out, there is more than sight involved in experiencing a place: "There are not only landscapes...but also associated soundscapes... 'smellscape'... 'tastescapes'... and geographies of touch". However, these are not LAN's only potential benefits - the way the network is configured supports both different and developing relationships between people via place-centred narratives.

APPROACH: DESIGN AND METHODS

The LAN design process involved developing the broad LAN concept (see above), field observations of tourists in Singapore, scenario and design concept development, generation of a prototype and, finally, an evaluation of the emerging LAN prototype. The process is best understood as everyday design informed by field observations and evaluations, against even a "quick and dirty" ethnography (Hughes et al, 1994). This poses a few problems for the design process discussed in this paper. For one, at no point in the development of the LAN prototype was ethnography conducted, although the initial observations could be regarded as a "quick and dirty" ethnography. However, that is not to say that there is not much to learn from the process we discuss here for ethnography. For through this process the team, developed refined and tested the LAN concept. Thus we will largely report on the evaluation of the LAN prototype, examining the kinds of data collection approaches that the LAN service supports, the analytical value of this data and how the service developed relates to cultural heritage. The design process and the technical details of LAN are described in Wickrama et al (2010).

The implemented version of LAN discussed in this paper comprised a lightweight netbook with Internet connectivity (e.g. via a USB dongle), a BlueTooth headset, a portable camera carried or worn (e.g. on a helmet) supporting an audio/video service connection to another person, in this case via Skype. Wickrama et al (2010) describe the envisaged end product of LAN as:

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"a social networking website, where living avatars offer their services to people who would like to relive and re-experience certain parts of the city, specific periods in their lifetimes or they are simply curious to see something that is remote, exotic or inaccessible for various reasons."

Thus the future development of LAN is tied to servicing those who has previously been/lived in a place. Here we are concerned with how LAN can service ethnography. The broader implication here is that due to increasing mobilities and personal connectivity a raft of information is available when in a place and appropriately connected, albeit information that, in Crabtree et al's (2006) terms, is "fragmented". There are technical difficulties with utilizing this data as well such as issues with the reliability of service and granularity of positioning data. However, despite these concerns LAN develops the experience of mobile guide systems away from traditional issues of managing variable network connectivity, personalization across devices and dynamic delivery of content (e.g. Kenteris et al., 2009) towards the facilitation of ongoing journeys through space, time, roles and interfaces (Benford et al., 2009) and, more specifically ongoing, developing relationships with often physically and temporally distributed others in hybrid environments and changing roles.

FINDINGS

In this section we focus on the data generated from the field trial of the LAN system. The primary focus of this field trial was to inform the (re)design of LAN. It involved two locations - the place being visited by the 'avatars', in this case Tanjong Pagar in Singapore (Figure 1, left - depicting one of the team in the 'avatar' role) and a meeting room from which the 'guide' interacted with the 'avatar' (Figure 1, right).



FIGURE 1: The 'avatar' on a walk (left) interacting with the physically displaced 'guide' via Skype (right)

As we noted above this was not an ethnographic study but there was a genuine motivation for the trial - one of the team's friends was visiting Singapore for the first time from Vietnam. The trial proceeded by 'the avatar', who had not met the particular team member playing 'the guide' before the trial, moving around the Tanjong Pagar area, finding her way and experiencing different aspects of the area's heritage (e.g. a well-known hawker centre). Observers captured interaction 'at both ends' via

photographs and video - one at the guide 'end' and four at the avatar 'end'. As will become clear below, as the trial played out all the people involved at both ends of trial became involved. Wickrama et al. (2010) describe a detailed content analysis of the 45 video clips, 118 photographs and transcripts generated involving the generation of three descriptive themes and accompanying sub-themes. Here we extract particular video extracts from the trial data for a different reasons - to develop insights concerning the value that this kind of data can offer and lessons for new ethnographies deploying such 'inhabited technologies' (Urry, 2004:35). Thus in what we present we do not aim to be complete, but instead extract and discuss the most relevant and exemplary material.

Individual perspectives

The LAN system offered a series of perspectives that were specific to person, place and even particular things. These perspectives often had quite different styles. In the first example depicted in Figure 2 and the extract below, the 'guide' (G) is helping the 'avatar' (A) find her way using her own knowledge and Google maps. The extract shows the shared uncertainty and need to find information in the environment, but Figure 2 (right) also illustrates the first-person perspective, 'reality show', highly indexical view provided via LAN. This extract also shows how interaction over LAN can be characterized as joint discovery, even cooperative work - in this case way-finding. The 'guide' and the 'avatar' work together when moving through the environment. As this movement unfolds different views of the place visited are provided.



FIGURE 2: The 'avatar' walking to the road (left) and at the roadside (right)

G: "Do you see any road name or any signpost?"

A: "The road huh?"

G: "Why don't you just walk to the nearest road and try to see whether you can find any signpost."

A: "Okay..."

The perspectives offered by LAN could be quite voyeuristic and, quite literally, 'in your face' as shown in Figure 3 and the extract below it. Indeed the view offered on the 'avatar' eating his lunch is quite intrusive yet strangely co-present for the 'guides' - they could even hear the sound of eating. Yet the 'avatar' does not express concerns for himself or the visitor from Vietnam being watched - holding the camera while eating seemed to simply be inconvenient.



FIGURE 3: Close up views of the ‘avatar’ eating his lunch

A: [sounds of him eating food]

G1: “Hey, how, do you find it distracting that, uh, that you have to eat and we watch you?”

A: “Um, I don’t know, it’s kind of okay, it’s just that it interferes with my hand a bit.”

As shown above LAN provides unique views on a person, place and situation. The uniqueness of the view could extend to the view suffered by an object, in this case a spoon.

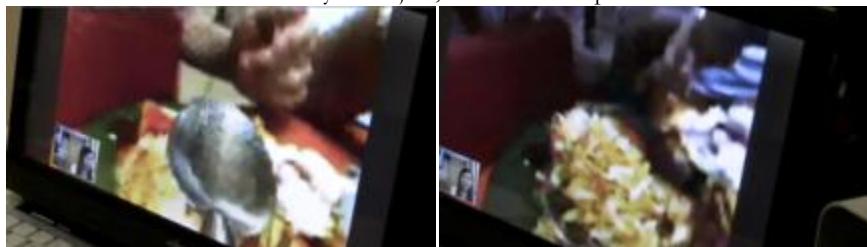


FIGURE 4: Close up views of the ‘avatar’ eating his lunch

G1: “I understood that you want to put the camera with the fork.

A: “Can use the spoon or not?”

G1: “Ahh this is cool! Yeah, wow.”

G2: “Ahhh.”

G1: “This is funny.” [laughs]

This view provided such a sense of ‘being there’ that one of the guides, completely unscripted, started describing the action in a form of commentary (Figure 5 and the extract below). She describes the action in a way that seems she is controlling the spoon, again indicating the shared nature not only of the experience but also the unfolding action. These different, highly individual views seem to promote the mundane yet sensory experience of being in a place being shared, somewhat curiously, across some considerable distance where, at both ends of interaction people are both present and absent.

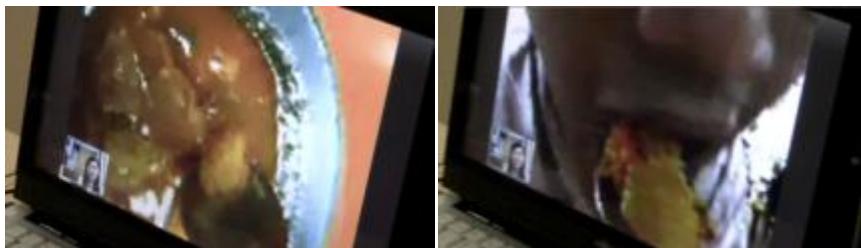


FIGURE 5: Close up views of the ‘avatar’ eating his lunch

G2: “It’s ah scooping the potato.”

G1: “Wow.”

G2: “And yet I’m not eating it but I’m putting it into your mouth.” [laughs]

Being in a place

Perhaps surprisingly given the camera resolution, a strong sense of being in a place was communicated through LAN. If anything the medium quality of the camera contributed to the experience. Figure 6 shows three views of a team member sitting down (Figure 6 (left)), the avatar team moving through the hawker centre (centre) and other people (right).



FIGURE 6: Views of the hawker stall and hawker centre roof (left), walking through the hawker centre (centre) and particular people (right)

Thus the sense of ‘being there’ offered through LAN was not static. There was a sense of an ongoing experience (see below), movement and change communicated through the camera being still or ‘shaky’. LAN also highlighted aspects of a place that are more unusual but important for getting a sense of a place - a hawker stall sign, the roof (Figure 6 (left)), and the walls (Figure 6 (centre)). LAN also offered views on anonymous others populating a place, walking through it and having their lunch (Figure 6 (right)). There was also a sense of capturing the mundane reality of a place through these views, a reality that is often glossed when trying to promote a place as a heritage site. Food and hawker centres are an important part of life in Singapore - they are not just visited by tourists but also lived by residents. LAN captured the different kinds of food available in a hawker centre (Figure 7), the soundscape and colours of the place as well as the particular food choices of the avatar team (Figure 7

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(left)) and a sense of engaging in lunch together (Figure 7 (right)). The latter was particularly evident when the camera moved and panned from one seated person to the next.



FIGURE 7: The visitor's lunch (left) and a team member eating (right)

The multi-faceted sense of 'being in a place' that LAN supports also seems important for both ethnography and heritage.

Key trajectories and interactions

The team's experience in the hawker centre, captured through LAN resembled a journey or trajectory (Strauss, 1993) with distinct stages.



FIGURE 8: The front of the dessert stall (left); ice kacang on the menu (right)

In one particular case they ordered a dessert from a stall called 'ice kacang' - a combination of crushed ice and sweet toppings distinctive to Singapore. This firstly involved going to the stall (Figure 8 (left)), checking who was there (extract below), viewing the menu (Figure 8 (right) and extract below).

G: "Is your friend with you?"

A: "Sorry."

G: "is your friend with you?"

...

A: "Can you let me see the menu? I can see but it's quite blurry."

A: "Quite blurry ah?"

G: "I can see it's ice kacang right?"

A: "Okay."

G: "Okay"

They then discussed options on the menu (Figure 9 (left) and extract below), comparing items on the menu with desserts in Vietnam (Figure 9 (right) and extract below) and discussing what to order (extract below).



FIGURE 9: "Kinds of beancurd" (left) and glass jelly (right) on the dessert stall menu

G: "What are this?"

A: "It's like fresh beancurd."

G: "Oh, okay."

A: "Some kinds of beancurd"

G: "Do you have beancurd in Vietnam?"

A: "Yes we do [unclear]."

...

G: "What about the black glass jelly? Do you have it?"

A: "Yeah, we have in Vietnam."

G: "Oh, so is there anything you don't see in Vietnam?"

...

G: "So have you tried ice kacang in Singapore before?"

A: "I [unclear] haven't tried it."

G: "So maybe you like to order ice kacang?"

A: "Yeah I think so."

Then the guide decided what to order.

G: "Okay then maybe you would like to order the peanuts and tell me how you find it?"

A: Okay.

Figure 10 captures the process of ordering. There was some laughter and amusement among the team after ordering - the LAN system also captured these emotions.



FIGURE 10: Ordering ice kacang - approaching the stall owner (top left), selecting from the menu (top right), paying (bottom left) and receiving change (bottom right)

After ordering, the ice kacang was delivered (Figure 11) and the guide and avatar discuss the heat in the hawker centre (extract below).

G: "Wow what's that? It's so huge!"
A: [laughing] It's a lot! Wah lau!
G: "Is the weather out there very hot?
A: "Yes it's really hot"
G: "It must be very refreshing" [laughs]
A: "A good choice!"



FIGURE 11: The stall owner (left) prepares the peanut ice kacang (right)

It then becomes clear the avatar has ordered an additional ice kacang (Figure 12 (left)). The guide instructs the avatar to focus on it (Figure 12 (right)).



FIGURE 12: The stall owner (left) prepares the mango kacang (right)

G: "Wow another one coming out!"

A: "Yes we ordered...with peanut and the other one is mango."

G: "Okay."

A: "Yes."

G: "Can you focus the camera on the ice kacang?"

A: "Can you see it?"

G: "Lower a bit. Yup. Wow! That's a huge one."

Finally the avatar and the rest of the team (Figure 14) sit down to enjoy what they have ordered. LAN supported the whole process of moving through a place and thinking about what they wanted, trying to decide, choosing, locating a table. This involved some role negotiation, direction by the guide and initiative from the avatar. The movement also helped in getting a sense of a place and its possibilities



FIGURE 13: The avatar trying the ice kacang (left) and describing her reaction (right)

Storytelling and memories

As already noted LAN supported engagement with particular ‘journeys’ (Figure 2) to a hawker centre and, in the case below, through the hawker centre to a particular stall that the guide remembered. In the extract below the guide asks the avatar to visit a particular stall.

G: “Oh okay I feel like eating some sweet soup. Can you order some sweet soup for me?”

A: “Uhhh, I don’t see any dessert stall around here.”

G: “Oh, what about the stall we went to last time, the peanut soup, is it open?”

Getting to this stall involved passing other stalls (Figure 14 (left)) and walking through the hawker centre (Figure 14 (right)). The extract below captures the talk on the way.



FIGURE 14: A hawker stall on the way (left), walking through the hawker centre (right)

G: “Are you finding the peanut soup stall now?”

A: “The peanut soup stall, ummm. Peanut soup stall.”

G: “I think it’s called “Peanut Soup Stall”.”

A: “Peanut Soup Stall.”

In Figure 15 and the extract the guide directs the avatar to the peanut soup stall she wants to visit. However, the avatar (Figure 15 (left)) discovers the stall is closed (Figure 15 (right)).



FIGURE 15: The avatar (left) discovers the peanut soup stall is closed (right)

G: "Yeah I think it's this one on your right."
 A: "Okay, on my right. I think it's closed already."
 G: "Oh it's close."

The journey to the peanut soup stall was a particular trajectory but it was also a story in itself that was based on the guide remembering a past experience of a particular hawker centre stall. Integral to the experience of this personal trajectory was, again, movement captured and communicated by the camera e.g. through camera shake.

LESSONS FOR NEW ETHNOGRAPHIES

We have already pointed to the development of “sensory ethnography” (Pink, 2009) and the various kinds of ‘scapes’ that can contribute to the ‘gaze’ (Urry, 2002). The extracts above illustrate how LAN engages the senses through movement (Figure 2), sound (Figure 3 and the extract and the ambient noise throughout), taste (Figure 4, 5 and extracts), and even touch through the sensation of heat generated through the videos and remarked on by the guide (Figure 11). These different views on the setting mobilize the senses despite the challenges of communicating this material in a ‘traditional’ academic paper: we could not, for example, represent the background noise or the tastes encountered effectively. However, the fact that it has been difficult to represent these first-person, mobile sensory interactions is itself informative. They also reaffirm the relevance of ‘the tourist gaze’ (Urry, 2002) to heritage-type experience offered through LAN. However, LAN not only supports viewing distinctive objects, seeing particular signs, unfamiliar aspects of the familiar, familiar activities in new contexts and familiar activities in new visual backdrops but also transmitting and sharing individual, singularly ordinary activities to new audiences via the Internet.

In some senses, however, the guides and avatars were performing for the camera in a research project. The experiences through LAN were also collective and mediated, negotiated and digital, marking them as distinctive from the original tourist gaze notion. However, Urry (2002:150-1), in the second edition of his book, describes different types of tourist gaze that are relevant here - the “*collective* tourist gaze” involving conviviality and the “*anthropological gaze*” involving locating a sights “interpretatively within an historical array of meanings and symbols”. The notion of the tourist gaze also concedes the inauthentic nature of the tourist experience via “staged authenticity” (MacCannell, 1973) and “pseudo-events” (Boorstin, 1964): “It therefore seems incorrect to suggest that a search for authenticity is the basis for the organization of tourism” (Urry, 2002:12). Heritage, it seems has a similar quest for and difficulties with the inauthenticity of authenticity. However, the candour of the footage presented here again suggests how ‘the local’ inhabits the ordinary. LAN highlighted for us the importance of food in Singaporean culture, the positioning of hawker centres in the everyday lives of Singaporeans and suggests their importance for them, something that is not staged but lived. Thus for others the videos may be distinct from “one’s normal place of residence/work” (Urry, 2002) but for Singaporeans we would suggest much of what is captured here is familiar.

The extracts also illustrate the value of the first person perspective provided by LAN, the ongoing sense of presence and absence experienced by both guides and avatars, a particular journey or

trajectory to achieve something and the various forms of work involved (e.g. wayfinding, decision-making). Some of the views offered by LAN are beyond street film and closer to a ‘reality’ genre where we obtain unexpected (and perhaps unwanted) views on everyday lives. Yet through the interaction offered by LAN these views become less voyeuristic than participative, pulling the audience into the movement, sensuality and even the emotions of experience. Such a rich, experiential view suggests the importance of ‘reconciling fragments’ (Crabtree et al., 2006) that are not only visual but auditory and tactile to access the experience in such settings. LAN also acknowledges the physicality and embodiment involved in moving through a place, to “sensually extend human capacities into and across the external world” (Urry, 2002:152) to experience a “multi-dimensional rush and the fluid interconnections of places, peoples and possibilities”. LAN recognizes we are emplaced (Cassey, 1996) - that bodies and places are interdependent. LAN’s openness as a service also acknowledges the centrality of different mobilities (not just movement) to the experience of a place and therefore places as temporary and evolving. This is never more relevant than in an era of ‘liquid modernity’ (Bauman, 2000). In this context we have also shown that LAN can, quite literally, connect distributed people and places, whether that be through current or past experiences.

LAN also represents a particular ‘way of seeing’ (Berger, 1972), constrained, defined and enabled by the specific people, places and technologies involved. As with oral history, the relationship between the teller and the listener, the guide and the avatar is critical. Certain places favour being viewed through LAN, particularly those that engage the senses. Yet we are also alerted to the contribution and role of walking to places and that places are extended and enhanced through such walking. The technologies themselves – through medium-resolution video capture, lack of camera shake correction, distorted voice rendering and at times unpredictable quality of network service offer a unique perspective on a place. These aspects of the experience of the technology, along with the mobility and unobtrusiveness of capture technologies and ubiquity and social acceptability of mobile technologies, contribute to a style of everyday film that, in some ways, serves to convince rather than contribute to doubt. What is captured unfolds ‘as it happens’.

Thus we suggest a series of useful insights for the practice of ethnography enquiry through drawing on the particular findings from the trial conducted. These lessons concern setting up, conducting, analysis and representation in ethnographic enquiry. A key theme throughout these concerns is what to make of the findings and knowledge generated through LAN inquiry. The first lesson is that new technologies suggest the importance of new forms of representation of ethnographic findings for new audiences and publics. This work suggests also suggests that experiences captured through video may not be reducible to text and even images. This is not to buy into the ‘total capture movement’ (Bell and Gemmell, 2009) but to acknowledge that being and living in place does not simply comprise the visual. The second lesson is that acknowledging, exposing and negotiating roles (e.g. ‘guide’, ‘avatar’) in ethnographic enquiry is useful. This happens in ‘real-time’ through LAN, and in its unfolding provides further insights into the (in)authenticity of a place. This relationship also forces us to think about the role of the self in ethnographic work e.g. as guide or guided. The third lesson is that documenting shades of difference between ethnography, rapid ethnography and field study, as we have done here, is important in order to understand views offered on a place and, more generally, the store we can place in any findings. The fourth lesson is that ‘outsourcing’ embodiment can still provide useful insights into experience. ‘Being there’, we would argue, is still critical for

understanding a setting, but, in many ways the observer *is* there through LAN. The fifth lesson concerns the surprising value of mobile video as not only a tool for visual ethnography but also for sensory ethnography. This is a question of placing value in the imperfections of real-time, real-place capture - background noise through ambient capture, unusual views through wild panning and movement through camera unsteadiness.

CONCLUSION

We have described and presented LAN, a means of combining more traditional approaches to ethnographic work (e.g. observation) with new technologies (e.g. mobile video). We believe that the move from everyday, personalized consumption to everyday co-production through new Web 2.0 technologies means additional opportunities for investigating social life, especially as this ‘social life’ is lead *through* the digital. This marks a distinct progression from the tools proposed by Crabtree et al (2006) to tools that support unsolicited, naturalistic production of data about social life. We have examined some of such ‘co-produced’ material here to explore what work it can do for the ethnographic enterprise, suggesting it can produce unique, individual views on a setting, a multi-sensory experience of being in a place, insights on extended sequences of actions and interactions and unfolding narratives. As Urry (2002:151) suggests one of the problems ethnography poses is its longevity and the potential intrusion it poses. Yet LAN ushers in another set of concerns with regard to surveillance and acknowledging the rights of those gazed upon, concerns that seem not to be shared by everyone. As services like LAN develop, we suggest there will not only be a series of ‘ready-made’ views on places but also new sets of readily available real-time data on hybrid lives lived through the digital and the physical.

NOTES

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Session 3: Obstacles and opportunities along "the way"

Makiko Taniguchi, Curator

Heroic Complexity in Strategic Innovation

TONY SALVADOR

Intel Corporation

I posit that strategic innovation – the act of carrying an idea through to execution – is an act of destruction as much, or perhaps more so, than it is an act of creation. Specifically, innovation is a violent act against an extant complex adaptive system, a system whose purpose is not only to survive, but also to improve its relative position vis-à-vis others in its milieu. Moreover, innovation that happens within institutions such as corporations is an act of violence against a system animated by extant social structures who also seek to survive and improve their relative positions. The result is a system whose emergent properties actively resist innovation, a point well covered in literature. Strategic innovations, already a low probability event, can occur with greater likelihood, therefore, if one leaves the system and returns in a structured manner, a structure I propose is remarkably similar to the Joseph Campbell's "Hero's Journey". Implications for the structure of strategic innovation, innovations very often at the heart of ethnographic work are discussed.

FOR YOUR CONSIDERATION

In this community, as researchers, we pride ourselves on discovery and invention, on the clever turn of phrase offering a novel perspective or point of view. As practitioners, we go further, reveling in the potential implications of our insights for innovation and impact.

I suspect we rarely imagine that our innovations are often violent acts. Innovative practices add energy to the society because innovation disrupts the current patterns of living and doing business. Innovation forces change, compelling innovators and their colleagues to change, to adapt. Innovation both creates and destroys.

To the innovator, innovation is a liberating force of good, a bright light of hope bringing us out of the dark night of mediocrity, sameness and oppressive bureaucracy. This is a happy, perhaps necessary, delusion in the mind of the innovator, like the warrior claiming the gods are on his side even while the enemy claims the same gods' allegiance. Meanwhile, the innovation itself rampantly destroys everything in its path, while the innovator pushes furiously ahead of the destruction.

Sometimes innovations are small, continuous improvements, which we perceive as benefits, the improvement outweighing the violence, the violence absorbed by the system. Other times, innovations are large scale events rippling through systems wreaking havoc; these innovations are often resisted.

Innovation means having an idea and seeing it through. Mathematically, you can write it as: Innovation = ideation X execution; innovation is a product, the result of a multiplication, because if either factor is zero, you get nothing (Govindarajan & Trimble, 2005). G & T define four types of innovation: Continuous process improvement, process revolution, product/service innovation and strategic innovation. There are three important vectors of expense, time and ambiguity of results, with strategic innovations being the most expensive, requiring the most time and offering the most ambiguous of results.

It's the latter, strategic innovations, that are the focus of this paper. These are the innovations that are considered particularly difficult and risky, but with strong upside potential. They are the most violent. They are the innovations that challenge the supremacy of the system.

That the violence often goes unrecorded, unchallenged or unrecognized is merely testament to its suppressed, hidden nature. I contend that one of the main reasons innovation is so hard, especially in large companies, especially strategic innovation is *because it is so violent*; because it threatens the supremacy of the system that is the corporation, because it challenges the extant social structure animating the corporation-as-system. What is a corporation but an array of resources and power to wield them, power invested in individuals and groups adhering to norms and policies.

Strategic innovation isn't hard because of a lack of resources – especially not in large multinational companies. Reverse the logic: Resources for innovation are limited because innovation threatens the power base of resource providers. Innovation threatens access to resources and thus position in the within the social structure. Innovation is hard because it is gated by people with power, who wish to remain secure in their power.

The business literature is rife with books and articles on the difficulty of strategic innovation, especially in large companies that have sufficient resources. Disruption Theory, Blue Ocean, Diffusion Theory, Five Forces, Diamond Models, Lead User Models, and the myriad other explanations and theoretical views describe successes and failures, promote processes and procedures and suggest structures and organizations. Individually and collectively, however, they fail to address what I contend is the underlying reason that strategic innovations are so difficult: Innovations are acts of violence that threaten the very same (often corporate) system comprised of the specific social structures, power and resource reservoirs that enabled the innovation to start in the first place. The system that births the innovations, then strives to stifle them. To escape this cycle of creative destruction, I propose that innovations should be framed not for their wonderful innovation, per se, but by recognizing the violence inherent to innovation, to reframe and recast the innovation in ways to mitigate the “system response”.

THE COMPLEX ADAPTIVE SYSTEM

Even in the most automated factories, people still do much of the work in corporations. People are the ones who are accountable. People identify problems, think of solutions and make decisions – most often under at least some uncertainty and duress. People do the work, take the chances, advance

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science and their industry and further establish, enhance or erode their company’s position in their business landscape.

Most people don’t work alone, but are instead part of group organized by an ethos, bounded by rules and norms. These groups have various names: companies, corporations, limited liability partnerships, small businesses, government agencies, non-governmental organizations and so forth. But, however different each is from the other, common to all of them is that they are complex adaptive systems, and they behave as complex adaptive systems.

A complex system can be described as a set of entities and rules such that given some input, you get some output. There’s a probability distribution associated with the expected output, or outcome given a particular input; this is important. Put simply, some outcomes are more predictable than others given the nature of the system.

Corporations strive for highly probable outcomes. Productivity, efficiency and quality are measures of predictability. A complex adaptive system incorporates feedback from the results and adjusts the input in a continuous attempt to increase the reliability and predictability of the output. In doing so, these systems seek an equilibrium or homeostasis, which is a form of stability, which is a measure of balance between input and output, but also a measure of its own adaptability. That is, systems need to achieve and maintain homeostasis — the expectation of the extent, pace and means by which the system is expected to or required to adapt on a continuous basis.

The corporation doesn’t do this in isolation. It is part of a landscape of other corporations and entities all interacting with one another, all adapting to change and attempting to maintain not only their own level of homeostasis but also that of the landscape as a whole. The systems in this landscape are not all equal. Some are stronger, faster or more resilient than others. These have higher “fitness” than the others. One can therefore imagine the landscape not only as entities with interconnections, but also as each entity represented by its relative fitness on the landscape. One way to determine fitness is by the entity’s ability to maintain, manage and control its own level of homeostasis in the context of the landscape. For example, the corporation with the highest profit margins may be the fittest entity on the landscape, and you can bet-your-boots that this corporation will want to remain at the highest level of fitness with highly predictable input and output at a high degree of homeostasis. Thus, our complex adaptive system does all it does in the context of a broad landscape with discrete interconnections, input, output, probability distributions and homeostasis.

The final characteristic we need to discuss here is “emergence.” The overall landscape is not managed by any all-powerful guiding hand (Smith, 1776). No one tells everyone what to do. (Though some people like to think they do!) In fact, even in large corporations, only rarely are people told explicitly what to do on a continuous basis. Rather, the individual entities in the system *act* and overall systemic behaviors *emerge*, which then feed back into the system entities, which in turn further adapt their behaviors, tuning (and raising) their fitness on the overall landscape. This point is important: The emerging behaviors provide feedback to the system. And the direct actions of individual entities (your boss, your CEO) do less to determine the system’s fitness than the emerging behavior of the actions by the whole system.

Let's return now to the focus on innovation. You have an idea for strategic innovation. You wonder: Will my boss like it? You present the idea to your boss, and your boss - or your boss's boss - likes the idea. And you think: "Great, my boss likes my idea!" But it almost doesn't matter because it's the wrong question. The question should not be: Will my boss like my idea? A better question is: Does my corporate system like my idea? Does the landscape like my idea? Or better yet, *how might I persuade the system or the landscape to like my idea? Or, even better, how might I persuade the system or the landscape to not kill my idea?*

The important shift here is from the individual as source of power to the system as source of power. It's sort of like gravity. It's everywhere. It's very strong. You can't see it, hear it, taste it or touch it. But you can certainly feel it when you hike, run or ride a bike uphill – or even get out of bed some mornings. However, this metaphor breaks down in that gravity is (mostly) immutable. But systems aren't. They adapt and change. But their adaptation is not driven by any one powerful guiding hand.

Perhaps this is the irony of achieving some individual power within a system. In some ways, it's more and less than what you expect. In some ways, you can do things like demand fresh-baked chocolate chip cookies in your hotel room on arrival. But in other ways – ways more meaningful to the system – the power to change the system either locally or across the entire landscape is less than what you expect, and certainly less than you might wish for. The system behaviors emerge as a result of the actions of many people responding to a wide variety of input, all of them acting to maintain or raise their own fitness both individually and as part of their local and global systems. No one individual, regardless of reaching the pinnacle of power, can change this by mere fiat.

Meanwhile, corporations are under continuous assault by current market forces across the landscape, working hard to expel inefficiency at every turn and striving with all their might to maintain fitness and equilibrium, or to improve their position in the landscape through ruthless optimization of their production and delivery of goods and services. Just maintaining a relative position in the fitness landscape is a full-time job *for the system*. Any *strategic innovation* that challenges the existing emergent behaviors of the landscape is a second full-time job, and one that the system may not be willing to readily and genuinely consider.

The point of all this is that the user research, market research, technological innovation and everything else you need to convince your boss to fund you is largely irrelevant to strategic innovation. Or perhaps I should say it's insufficient. For your strategic innovation to have any chance, it needs to reflect a specific understanding of the system's emergent behaviors, the relative fitness of entities across the landscape and the degree of homeostasis achieved and desired.

In some ways, business models like Porter's Five Forces and Christensen's Disruption Theory do address the concept of system performance over individual actions. And authors like Govindarajan & Trimble address incremental adaptations when conducting strategic innovations – a nod to the unpredictable emergent behavior of the system. However, all of these models stress the actions of the innovator as key to the success of the endeavor. I argue that the actions of the system should be

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stressed instead; the emergent behaviors of the system are key and should be considered paramount by the innovator.

The system is a source of energy, and the innovator needs to channel that energy back into the system in a way that's palatable to the system. It's like judo: Direct challenges will be met with strong resistance. Challenges where the *benefit to the system* is unclear will be met with strong resistance no matter how brilliant the idea.

Consider these unwritten system rules:

- *Your strategic innovation must not conflict with any of our current business endeavors anywhere in the world or undercut any of our current products.*
- *Your strategic innovation must not conflict with any of our current customer's business endeavors or undercut any of their current products.*
- *Your strategic innovation must embark on something the company can do uniquely and that the company should do uniquely.*
- *Your strategic innovation must be more profitable than anything that anyone else at the company is doing for the same investment in the same amount of time – regardless of future possible growth.*

Taken together, these rules mean the system is suppressing strategic innovation by forcing the innovation to conform to the (often unwritten) rules of the existing system. This charter all but eliminates the possibility of a *strategic innovation* – one that changes the system dynamics. You can't both conform and change the current system dynamics simultaneously. Or maybe it's just very hard to do! Put this way, your idea, no matter how wonderful, is stripped of its power to change the emergent behavior of the system.

Thus, corporations are complex systems, continuously adapting to maintain and improve their fitness across a given landscape. Any strategic innovation necessarily threatens the corporate fitness. Therefore, most innovations while initially welcomed, will be met with latent resistive force eventually quashing them.

In this context the innovator can now be seen as nothing less than heroic, as one who is out to change the system.

THE HERO'S JOURNEY

The Hero's Journey describes an arc of near impossibility, a low-probability event in which the hero and his fellow journeymen challenge the system they left. After all, Joseph Campbell's 1949 analysis of the world's great stories makes this perfectly clear: The point of all hero journey's is to go off and acquire new capabilities of some sort – through (*very often violent!*) trials and tribulations – to return and change the status quo. The Hero's Journey is, in fact, a structure – a recipe – for challenging systems. Canonically, heroes only change systems by leaving theirs, going through another and returning with the resources necessary to change the former.

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To me, the Hero’s Journey captures and describes the humanity of practicing strategic innovation. It relates how much more challenging it is to do so within the confines of the current system, how the *heroic* drama of the innovation plays out structurally and systematically across the system and whether it’s a success or a failure.

The word “hero,” as commonly used in day-to-day conversation, connotes people jumping in front of buses to save children and old people, or soldiers diving on grenades to save their comrades. But these are not the heroes that Campbell references; his are the heroes of our mythological inheritance, Eastern and Western, Northern and Southern over the millennia. They include more modern heroes as well, such as Luke Skywalker; George Lucas expressly relied on Campbell’s structure in the telling of the Star Wars epic.

Not all hero journeys end gloriously. Many heroes perish in the telling, while fewer seem to survive and return. I haven’t counted, but I can’t help but wonder if the proportion of successful hero tales – given the number of heroes attempting journeys – rivals the proportion of successful innovations – given the number of attempted innovations. The point for our purposes is that the returning hero changes the system like Mahatma Gandhi, Lech Walesa, or Vaclav Havel – or Jason, Hercules or Luke Skywalker. In fact, the hero’s job isn’t done until the system is changed. And since we now know about the strength of the system’s resistance to strategic innovation, I think it’s a fair statement to say that systemic change is heroic, certainly in this sense.

We take a further step, and situate the hero’s journey in the context of complex adaptive system dynamics. In this way, we can read about the journey of the hero (and/or the strategic innovator) with all the drama and heroics necessary to capture its humanity. We can also identify key resources, questions, methods and approaches to securing our passage on our journey or preventing embarkation before spending our time and treasure.

We remember Jason’s struggles to steal the golden fleece; and that’s the exciting part. But it’s a small part of the story. The context matters. I argue that a deep understanding of the relevant system dynamics is that context, that preparation and re-preparation are where a strategic innovation is won or lost.

Central to the thesis of Campbell’s book is that strategic innovation challenges and is challenged by the social, political, cultural and social structures embodied in the system. Campbell talks about three main parts of the hero’s journey: departure, initiation and return.

Departure is dominated by the “Call to Adventure”. How does the call happen? Where does it come from? What initiates a “call”? The call arrives in context; it’s not random. Campbell’s explanation draws from Freudian analysis; in mythology, the call represents the deepest parts of our collective unconscious. But even the collective unconscious is context. Similarly, strategic innovation is not random. It happens in context. Innovators don’t come up with ideas out of thin air. Lateral thinking, “Eureka!” moments represent only the pinnacle, culmination or climax of context.

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For innovation, context is the system to which the innovator is attuned; it may be his or her group, corporation or industry system. The “insight” can be seen to represent the collective unconscious; it can come from the deep-seated fears of the corporation or from the optimism of youth.

The competitor – a source of angst – threatens the system directly, and when he or she is working well, elicits an *innovation response*. The system has built systemic processes and defenses for just this purpose. Continuous innovation maintains the fitness of the corporation, which ensures the system’s survival.

The insight is itself a call to adventure. It lures the innovator forward, like Sirens to sailors. In strategic innovation, the insight can be seen as an opportunity to respond to a threat. But the response often becomes a challenge to the nature of the system. And the journey is engaged.

The innovator wrestles against two foes: The system resists change, and the threat resists attack. Both sources of resistance are strong, but we suspect the system’s resistance is the more formidable foe. At least it was in our case. The system is closer. It has more control. The innovator is part of the system’s social structure. Consider this: Within this system, you have friends and colleagues; you’ve known each other for years. You’re counting on them for a little rhythm. The system is not expected to resist. Certainly not to the extent it does. Certainly not in the way it does. It stealthily seeks to maintain homeostasis and fitness. Ruthlessly. And herein lays its strength: The innovator is often caught unaware; he or she feels a sense of betrayal. Rather than fighting for the home front, the innovator is struggling *against* it.

In the beginning, the lure seems almost irresistible. But most heroes recognize the peril – at least a little bit. Answering the call to adventure must be intentional. The call has the scent of danger. The innovator knows it, feels it, senses it. While there are several stages of the “departure”, I delved a bit into the “call” because it gives us a strong sense of the “set-up”, the milieu or palette, against which the hero commences his/her journey of innovation.

Eventually, the hero accepts the call, and with supernatural aid proceeds through the various difficulties that test the hero and his comrades. It’s these relentless tests and struggles that make these stories so compelling – each one more improbable than the last. The hero passes into a *zone of magnified power* requires an actual passage. In mythology, the hero undergoes a passage through sojourns in the bellies of whales, elephants, monsters, wolves and other entities, then “...undergoes a metamorphosis: “The passage of the magical threshold is a transit into a sphere of rebirth.” The hero’s former self is demolished, “annihilated,” and “ceases to exist” – in one way or another.

At this point, the perceived threat to the system is at its height. The innovation is poised for expansion, even though its business value is not yet clearly manifest. It can’t be. The system has kept a “governor” on the gas pedal to increase the restriction up to this point — the exact point at which the innovator wants the governor off entirely. Tension is at its maximum. This is precisely when we kill off many of our innovations.

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In our corporation, the hero must cease to be a part of the corporate system and represent the new system instead. At this point, the hero has little choice. And he must not waver. This is the point at which a new system is forming; this is the beginning of anthropologist Gregory Bateson’s (1935) conception of schismogenesis – the beginning of the split. It’s the start of seeking autonomy, as Govindarajan and Trimble suggest, and it is absolutely necessary.

This is the point at which all the powers on your behalf must be sufficient to overcome the system’s resistance. Here, you will need to muster all your power, to bring to bear all your knowledge of the existing system and all your knowledge of your strategic innovation and force past the point(s) of tension.

Of course, the trick is to know exactly when this point is. It’s not an argument. It’s not a business case. *It’s a social power challenge* – a “power struggle” if you will allow that phrase redefined here. It’s not a clash of individuals and their power, but of systems and system power. I think it’s OK to recognize it for what it is. I think it’s OK to shift your game plan from logic and argument to socio-cultural power dynamics. I think this is the time to use every last bit of system power that you can muster on your behalf. This is the time to be ruthless – because if you don’t use enough force, your endeavor will fail. Like so many others, your innovation will falter. And you will not return to a hero’s welcome. Thousands of years of myth can’t be wrong.

But for those who do emerge from Campbell calls “the belly of the whale”, feeling all refreshed and invigorated, our hero is finally ready to slay some dragons and achieve some boon. In other words, after significant preparation, the innovator can navigate both the old system and the new, can begin the long, tough propulsion of her endeavor up the fitness landscape. The preparation is crucial — the earliest stages set the course of the hero’s adventure through hardships and perils of every sort. Her friends and associates, the assets at her disposal, the charms and amulets available to her, the power she possesses – all of these are laid early in the preparations. They don’t magically appear at the precise time of need.

Sometimes the hero doesn’t want to return: “*Who, having cast off the world would desire to return again? He would only be there* [original emphasis]. *And yet, in so far as one is alive, life will call. Society is jealous of those who remain away from it, and will come knocking at the door.*”. Here Campbell talks about the society as an entity, society as a force. Society as a system.

The system needs to keep an eye on its heroes. The system should attend more to returning strategic innovators, whether they are successful in the classic sense or not. The system should hold the returning innovator accountable for improving the system, for deriving from the innovator the last shreds of value even as the primary threat is neutralized. The strategic innovator’s journey is an expensive endeavor in terms of treasure and human effort. Its risk can be mitigated, and the endeavor can seem far more palatable to the system if the innovator actively considers how the system can benefit independent of the innovation.

It’s also incumbent on the innovator to improve the corporate system. The corporation enables these forays into the zone of magnified power. It’s difficult, of course, for strategic innovators to want

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to or plan to come back with good grace and enlighten the corporation after the system fought them and ultimately squashed their innovations. But this is not the system’s fault; it’s what systems are designed to do.

The innovator, returning, finds that she comes with experience, knowledge, insight and capabilities foreign to many or even most of her colleagues who haven’t been on the journey, as well as espousing concepts foreign to the system as a whole. The innovator must find her way; and must find a way to “...teach again...what has been taught correctly and incorrectly learned a thousand times...”. The goal of the innovation is not to diminish the system, but to raise it higher on the fitness landscape, even if the system perceives the innovation as a threat. This is the great irony of strategic innovation.

In the end, the system must do everything it can to survive the onslaught of innovation, from within as well as from without. In the end, the system must act prudently to maintain its fitness, stability and social structure. It must because it can act no other way; it would defy its own nature as a system. The hero/innovator must bring the boon – the capabilities, learning and outlook – from the innovation to the system. Ultimately, the innovator becomes a master of the two worlds, possesses the ability and the “...freedom to pass back and forth across the world division [from the day-to- day to the extraordinary] not contaminating the principles of the one with those of the other, yet permitting the mind to know the one by virtue of the other”..

This vital and final point is often lost or missing in the endeavor of strategic innovation. Hence, even in the end, when the system has “won,” it sets the innovation more at odds with the system than is warranted, increasing the system’s negative response to this innovation and to innovation as a whole. The innovator must return as teacher, or master. And the system must recognize and welcome the innovator back into the fold as such.

The cycle is now complete. The strategic innovator has returned, successful innovation or not, heroic nonetheless.

SUMMARY

I would suggest that at least some if not all of the heroes in our story are too self- centered, too focused on “their idea,” too enamored with “their story” and their own imagination of the possibilities for “glory”. They feel oppressed by “the system” in large part because they fail to address the energy of the system. They struggle against the system because they operate under the misperception that their direct actions should have direct, predictable effects. And their local systems – and social structures – operate under the same misimpression: that your individual actions should result in what you say they should result in, thus increasing overall system fitness and our collective relative position on the landscape. But the system resists. Bad judo.

I submit that the perspective of the strategic innovator should reverse from the innovator looking out and adopt a view of the system looking in toward the innovator and the innovation, considering explicitly how the overall landscape would see the innovation. The strategic innovation should be viewed from the outset as if the landscape were the gatekeeper, not your boss or your boss’s boss or

even the CEO. The strategic innovation should consider the system energy, direction, equilibrium and where that innovation would be disruptive, as well as how to divert, use, recombine and embrace the system energy as the innovation is initiated. This is what strategic innovation requires: an inverse, converse perspective from the individual to that of the system and of the landscape. Good judo.

NOTE

The Intel Powered Classmate PC: A Heroic Tale of Complexity is presented in Comic Form during the presentation at the conference.

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TURN AND FACE THE STRANGE: AN ETHNOGRAPHIC APPROACH TO CHANGE MANAGEMENT

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The ability to lead organizational and cultural change has never been a more critical factor for success in business than today. With renewed urgency many executives ask what do with their company culture(s): “Why can’t we build organizations that are more innovative, inspiring, and more agile – and why do our change initiatives typically fail?” Based on project engagements where questions like these have been a focal point, this paper aims to shed light on the conditions and role of business anthropology to take active part in enhancing organizational change programs. Through concrete examples, it discusses central challenges on how we as ethnographers can strengthen our approach when navigating in change programs – not only in terms of how we decompose and diagnose culture (telling companies what they should not do) – but more importantly on how to play an active role in leading the way and tackling complexity through positive enablers of change.

INTRODUCTION: TAKING UP NEW CHALLENGES – GETTING OUT OF OUR COMFORT ZONES

The ability to lead organizational and cultural change has never been a more critical factor for success in business than today. In a world of unprecedented change and competitiveness companies need to look closer at their organizational performance to assure that the company and its employees are geared to take up future challenges and deliver the expected returns.

At the same time – with the rising complexity of companies – organizational culture is increasingly becoming a black box and thus harder for companies to understand, predict and transform. Organizational culture has become a bloody battlefield where culture is often presented as a slowing drug that works against top management’s ambitions of increased and sustained revenue and profit. In such a climate business anthropologists working as consultants are asked to demonstrate renewed relevancy and impact of their work to help clients understand, control and drive cultural change.

Approaches to change management and organizational performance have been extensively described in the business literature within the last twenty-five years primarily driven by disciplines such as business strategy, human resource management, and organizational psychology (Hofstede 1990, Schein 1994, Kotter 1996). The increased focus and professionalization of organizational change initiatives naturally raised the attention of the softer sides of change in the business environment where the hard facts made it evident that there was – and still is – big money in measuring and putting corporate culture on formula to enhance due diligence processes, downsizings, restructurings and improve hit rates for successful mergers and acquisitions (Mobley, Wang and Fang 2005). The typical issues on organizational culture in this literature have concentrated on how to make the best cultural fit when companies merge, and how to make transformations stick in the organization, avoiding human and cultural resistance to change? Most of the literature stresses the importance of the human and

cultural sides of change yet few pieces offer substantial guidance on how to really observe, understand and take advantage of the unique cultural DNA and the building blocks that drive change.

Looking at our professional field, great ethnographic contributions have been made on organizational studies, work culture and production rites (e.g. Van Manen 1979, Orr 1996) but the field of change management¹ has not yet received acknowledged attention among a wider crowd of anthropologists and ethnographers; little emphasis has been placed on how our methods and work can be used to better support and lead lasting transformations in corporate environments. One obvious reason for this might have to do with the traditional and widespread passion for going native and *making sense* of everyday people's life and work and not on actually *transforming* peoples' life modes and behaviors.

We have the methods and tools for uncovering practices and tacit needs among everyday life (Schwarz, Holme, Engelund 2009) but what is less described is how to make these insights applicable for especially top management to take decisions on. As Nafus and Anderson (2006) argue, the field of industrial ethnography tends to use a certain rhetoric or claim of a special relationship to “real people”. I would argue that this rhetoric and passion for the “real people” approach in the case of organizational ethnography has made us biased even skeptical towards entering the management rooms where we are faced with questions like: “Which parts of our everyday culture are slowing our growth and why don't we just get rid of the employees who are not willing to make the change?” Within our field, being part of change management programs seem to connote a sense of “being in bed with the enemy” in contrast to representing and painting the lives of the real people whether these are workers in the production lines, R&D employees, or the hardworking sales force. Our special relationship to “the real” everyday life has made us reluctant to deal with change programs because they often have significant consequences for the culture or the “real people” despite the fact that they hold the potential of delivering sustainable business results for the organization. We hereby reduce our roles to “poets of everyday life” at the expense of opening new opportunities for our field. The consequence of what I would term “the management fear” is that our discipline so far left has the job of understanding and leading cultural change to management theory and consultants with limited human factors understanding: As a result organizational culture has been “managementized”. The positive thing is that the situation has made organizational culture easier to measure but has far from given the sufficient guidance to why changing mindsets and behaviors rarely succeeds with this generalized approach.

Using actual project engagements and experiences as the guiding point, the paper therefore aims to shed light on the conditions and role of business anthropology to take active part in enhancing organizational change programs. This paper seeks not to provide a silver bullet formula on organizational culture rather it explores the challenges and opportunities for business ethnography in organizations where the need for tackling and harnessing cultural complexity continues to grow.

¹ A change management project in this context refers to a structured approach to transition an organization from one state to another and where the behavioral change of the employees make up the outputs of the organization

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In the discussion I seek to address the following questions: Can business anthropology play a more active role in highlighting the positive enablers of change in order to make people work together more effectively and efficiently? How can we find the balance between cultural diagnose and cultural change without loosing our ethnographic integrity? Acknowledging that such questions require a hands-on approach the paper will build upon and present concrete project challenges and learnings from the perspectives of both client and consultants.

SETTING THE SCENE

In the summer of 2009 my consulting firm conducted a research and consulting project for an international engineering company working within the building and transport sector. After some challenging years of adversity the executive management wanted to reenergize the company and become more profitable by building a stronger profile and brand. The aim of the business-to-business project was to make an external analysis of how the company's key customers perceive the company and an internal analysis of the company culture and what drives change among the employees. In essence, a project helping the client better understand and improve the interface between the needs of the company's customers and the culture and behavior of the employees. The direct client was the company's executive management and HR-department.

In order to consult the company on which cultural building blocks were of greatest importance to boost pride, creativity and performance in the organization, we were deeply involved in the everyday lives and narratives among hardworking engineers across several departments and locations. The challenge was not only to decode the cultural patterns of the organization rather it was the derived implications of this analysis that created central learning experiences on how to enter and engage in new change-relationships with our clients.

During a period of more than two months a team of five ethnographers took part in and observed different organizational workarounds, client interactions, lunch breaks, sales meetings, and daily project assignments as well as interviewing and observing key clients. The research design took focus on five selected areas covering various levels of the organization on both project employee, middle management and executive level where we followed the monthly strategy meetings. In conversations with the executive management and HR-director we agreed that an open and deep approach was needed to get beyond what was defined as the yearly “generic employee satisfaction survey” which in reality revealed very little about the key characteristics and DNA of the company's culture.

AN ETHNOGRAPHIC APPROACH TO CHANGE MANAGEMENT

In order to show where we as a business discipline could have a more value-adding role to play, I have chosen to emphasize on selected key challenges for business ethnographers to learn from, acknowledging that a paper will not be able to cover all aspects of the project satisfactorily. I will discuss three central challenges: first, the challenge of unlocking the black box and clarifying the change ambition and the cultural problem to be solved, secondly, showing the evidence of the cultural

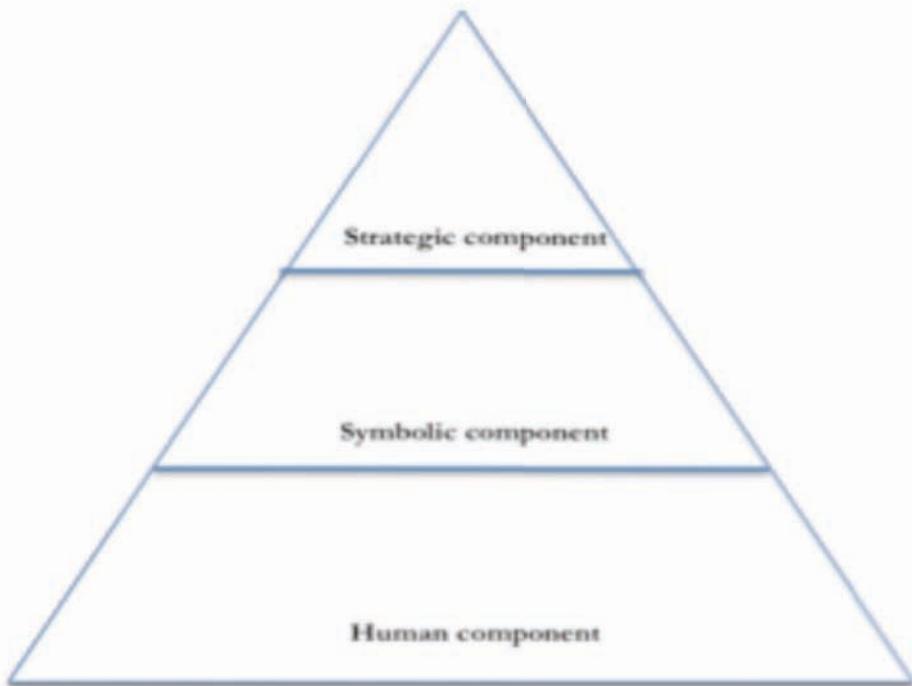
DNA to create understanding and commitment, and thirdly, enabling the positive elements for change to ensure visible results instead of building additional conflicts and trenches.

Unlocking the black box of culture: Focus on the core problem to solve

Obtaining a stronger company culture may sound as an imperative in all change programs but a strong culture in itself might not only bring immense advantages. A strong company culture might benefit from consistent values but might be confronted by inflexibility because people get used to working in certain ways where they passively build a protective instinct towards change. One of the most important challenges when working on such a broad field is to help the client enhance the understanding of the cultural problem to be solved and that you share the basic assumptions and definitions of culture in order to change it. One central learning here is – in contrast to well-defined financial and technical terms – that culture is an abstraction that for many leaders has become a garbage can of elements they found hard to fit anywhere else.

When leaders speak of making a cultural change they most likely refer to a mix of beliefs and assumptions triggered by a combination of issues like decline in sales, lost market share, decreased employee retention, or slower working processes. When working on cultural change projects we must use our experience and break down these assumptions into more concrete points to understand why there is a need for making this change and in which parts of the company the issues are most dominant. By recognizing the actual business problem we can make a clearer link between culture, business performance, and leadership. Inspired by Schein (1994) and Jordan (2003) we used a framework with three different components of organizational culture to guide discussions and clarify success criteria (see model) hereby ensuring that cultural change was not solely a matter of traditional definitions such as tacit values, beliefs and behaviors. The three components are the strategic component, the symbolic component, and the human component. The strategic component describes the company's values, business strategy, vision and mission. The symbolic component describes structures, processes, office layout, artefacts, and shared stories. The human component relates to unarticulated values, emotions and behaviors, which are the everyday drivers of change and engagement among employees. By applying this framework we made it easier to articulate and create a shared understanding of the core problem to solve with the client team – making the link between business strategy and desired behavior more clear. Since culture and leadership in this case are two sides of the same coin the framework also gave the leaders a way of conceptualizing the culture in which they as leaders are embedded.

Schein argues that simply because culture is so hard to create and manage, today's leaders need to better understand the dynamics of organizational culture if they don't want to become victims of it. Our challenge as ethnographers here was that we are trained that everything is relevant, are suckers for social complexity and claim to have a special link to the ‘real people’. If we want to ensure greater business impact, our thinking and communication simply need to be more applicable by making clearer links between culture and business strategy in order for the company to relate to and act upon.



Model: The three components of organizational culture guided the company's understanding of how strategies, symbols, and behaviors are inextricably interconnected when leading cultural change.

Show the cultural DNA, don't tell it

Establishing a shared understanding of definitions and frameworks of culture provides an important starting point in change management projects. In this case, these discussions initially took place with the executive management group. But one thing was to agree on definitions and key areas of investigation – it was much more challenging to establish a shared understanding of the analyzed company DNA and the consequences of it when we mirrored this up against the external analysis of the company's customers. As mentioned, we were asked to describe the company from both an internal perspective – by focusing on employees, interactions, and workplace rites – as well as an external perspective investigating how the company's clients defined the brand, services, and communication.

The triangulation approach was clearly challenging since it urged the need for identifying improvement areas across the predefined themes and categories. Through extensive observations, interviews, interaction mappings, and perception exercises we found it initially hard to communicate

the findings. After our first briefing meetings the client told us that they had concerns that our approach was too abstract and fluffy to communicate, and in the following weeks we realized that one reason for this had to do with the fact that the communication and symbolic language in the particular engineering culture was “silent” and extremely subtle.

Modern organizations and workplaces are among the most complex ritual systems ever developed (Auslander 2003) and studying this particular company where tacit rituals, deep concentration and passion for the detail were dominant features challenged us to be more intelligent in the way we investigated, analyzed and communicated the cultural building blocks. In order to avoid the claim of being too abstract we had to show clear evidence of our findings instead of just explaining them. Theoretically, we found inspiration within the classic pieces of symbolic anthropology (Geertz 1977). Working in such highly structured and complex engineering environments made it important to provide a narrative the employees could relate to and identify with but also a narrative and an idiom that stressed the burning platform and why change was needed. We worked with a narrative of a company having lost its sense of purpose and its original sources of energy by comparing the culture to mechanical metaphors such as different car models and brands. In our interviews with the engineers we had found that communication around the company values and characteristics was remarkably easier when talking about machines and mechanics instead of talking about abstract things like what they “felt characterized the company culture”. The synthesis of these perceptions became a concrete story and visualization showing the cultural DNA that lifted up the story from the realm of practicalities of everyday affairs – and provided a metasocial commentary of collective existence. The concrete idiom made it powerful, fun and easy to share, discuss and communicate among the employees. Combined with other findings communicated in visual and humoristic ways – one being that the engineers had a self-image of being active sales people; however we found that they performed what we termed “aggressive sales by waiting by the phone” only waiting for their customers to call them – the narrative initiated a process of self-awareness that slowly became a story the employees told themselves about themselves.

In order to put some harder and more measurable facts on the initial findings from the observations and interviews we decided to qualify these findings through an internal survey with both closed and semi-closed questions. We chose this approach for two reasons: first, because communicating evidence from employee interviews cannot be done with video due to confidentiality and therefore not made as “real” as we tend to do when documenting consumers’ homes and everyday life. Secondly, because showing the quantifiable volume of the insights made the arguments and burning platform for why change was needed measurable and more evident. As a side effect, the survey results also turned out to be effective means of communicating the findings in combination with mechanical metaphors because the numbers and charts were easier for most of the engineers to relate to and understand since these were part of their everyday language.

The challenge for the ethnographers here was to reduce complexity and make findings on organizational culture(s) concrete and easy to communicate so they can be shared, and challenged, hereby making them part of the everyday language and the change journey. Without explaining the concrete consequences of these narratives and linking these to the business strategy, the stories can

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unintentionally end up glorifying the status quo making adaption to external changes in the market somebody else's problem.

Building change on cultural energy and everyday heroes

What separates humans from animals is not that she has a language and can communicate. What separates humans from animals is the ability to think about the future. As humans we can make projections and scenarios of what we desire or fear will happen in future times. This makes us both anxious and opportunistic creatures. The Swedish neurologist David H. Ingvar (1985) has investigated why alcoholics find it difficult to change behavior because of lack of neural machinery and imagination for projecting a better future. Ingvar indicates that our ‘inner future’ is made of our past and present experiences – in essence that imaging a better future requires an ability to remember the past. Having lived as alcoholic abusers most of their life has made this memory the dominant story of the past where the scenario of a future without alcohol gives a sense of being part of a science fiction movie. The analogy is striking when it comes to leading change management projects: If the company culture has been stable and delivered satisfactory results over a decade (i.e. the memory of stable alcohol routines) it has limited cognitive repertoire for anticipating or imagining a different future. People will most likely – in the search for comfort and certainty – continue doing what they do slowly falling into the old rhythms and “start drinking again”. If not provided with a relatable vision and story where you can *learn* what the new future will bring the greater is the likelihood for change projects to fail. If the story about where to go doesn't resonate and link with the company's heritage and cultural identity the project will most likely be excluded like a foreign body.

An important learning for us here was to avoid making this vision and story about change solely about and for the executive management team if we were to succeed and engage the employees – we had to find local ambassadors, teams and networks who could help drive the change at different levels in the organization. During our research we identified central “knowledge grids” of unofficial opinion leaders who were highly respected for their engineering expertise and experience. This gave us inspiration to use these everyday heroes as a way to boost pride and tell the story about the transformation. This was not a story communicated in traditional business language of increased revenue or profit, rather it focused on the benefits of improving creative skills, cooperation, and technical expertise to deliver greater and more challenging achievements; putting the engineers' mark on the world at the centerpiece. In contrast to the executives' belief – who were of the opinion that it would be almost impossible to get these opinion leaders on board since they per definition were reluctant to change – we worked with an initiative to win the opinion leaders because they were setting the informal agendas and challenging the strategic component of culture, described earlier. This way we wanted to make sure that local heroes – who could be mediators of past and future – could drive the transformations. And in order to ensure that the insights and vision was properly negotiated and discussed bringing employees along the journey, we hosted a number of workshops and exercises with around hundred middle managers and key employees where we shared and tested ideas for change ensuring that this was not a “do as the management says” kind of process. Since substantial changes of the culture can take years these processes need to be continuously repeated, measured and developed to ensure employees understand and feel ownership to the direction and what it means for them.

Since every organization has unique characteristics and heroes, the challenge for ethnographers is to be more strategic in the way we identify and work with the enablers of change and point out the ones who can best drive the change, who can take ownership of the vision, translate it to concrete initiatives and create visible business results. Anyone leading a major change program must therefore take the time to think through the “story” and link the story to the existing foundation and DNA of the company and to explain that story to all of the people involved in making change happen. Business ethnographers can help bridge past and future by showing not only how cultural transformations has taken place historically but should also become much stronger communicators of *where* to go and not only *from* where one should departure. Through our deep understanding of the corporate DNA and what transforms the culture we could actually have a more prominent role in helping companies taking step-by-step approaches showing how to get there.

CONCLUSION: PERSPECTIVES ON THE ROLE OF ETHNOGRAPHY IN CHANGE MANAGEMENT

The paper has described how understanding and changing organizational culture is a key success factor in today’s business. Yet, as a discipline ethnography has so far left the job to management consultants with limited human factors understanding to drive this field. As a consequence organizational culture has been “managementized” where the focus on the individuals (e.g. through traditional employee satisfaction surveys) and not on the interaction and shared beliefs *between* people has made it complicated for companies to really find the corporate energy that will enable a lasting change. Cultural change does not only take place in corporate training programs for selected employees. Large change programs require all employee levels are involved and they require a deep understanding of how to take advantage of what really happens when employees influence and bump into each other. In this context, I have argued that companies can gain better and more sustainable results, if we as business anthropologists want to take a more active role in advising on how to identify and work with positive enablers of change. This requires that we see ourselves not only as analysts but also as advisors who really dare to initiate and drive changes that have significant consequences for the employees. Consequences that sometimes might challenge our professional comfort zones and our special link to “real people”. I have not argued for an already out there silver bullet solution instead that business anthropology should reclaim the space we’ve lost and are losing to other disciplines.

The paper has focused on three selected challenges for business ethnography in enhancing change management programs and taking a more thought-leading role. The challenge of becoming better at understanding and delivering on the core problem to solve – linking business strategy with culture, the challenge of communicating the cultural DNA in powerful yet concrete ways that both create identification and a narrative for change, and lastly the way to turn the everyday heroes in the organization into drivers of change in order to create lasting results at various levels in the organization.

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Ethnography in the Age of Analytics

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TODD CHERKASKY

SapientNitro

As North America begins to emerge from the global financial crisis of 2008-2009, companies are turning up their investment dollars. This investment includes a renewed focus on what might loosely be called “the customer experience.” In our recent consulting engagements, this focus often comes in the form of a clearly stated client demand for a very unclear concept – a “360 view of my customer.” The metaphor conjures up a pantopticonal image of customer beliefs and behaviors which would precipitate a perfectly calibrated set of products and services. Ethnographic practice would, one would think, be well positioned to support this renewed focus on experience. However, we have found that the conversation about customer experience typically begins – and ends – with analytics and business intelligence. The metaphor of a “360 view of my customer” has led to an emphasis on data acquisition, with less of a focus on experiential understanding. That said, data modeling can be fruitfully employed with the interpretive practices of ethnography – as long as the focus returns to experience and away from data hoarding.

CONTEXT

We who are in the business of trying to understand consumer behavior in the service of marketing and commerce face two independent but simultaneous revolutions. First, consumers are spending ever-increasing portions of their lives inhabiting what we could broadly call *the digital space*. Everyone has their favorite stats that support this seismic trend. Some of our recent favorites include:

- Twitter has 190 million users; it has reached over 50 billion tweets; during the recent world cup, Twitter posted 850,000 tweets a second.
- YouTube has over 2 billion videos streamed; there are now more hours of video on YouTube than there are hours of broadcasts since the beginning of television
- Facebook is now the world’s third largest “country”, recently reaching 500 Million members

The point is at once straightforward and hard to fully appreciate: Increasingly, the digital isn’t something that people do, it’s something that people *are*. Understanding consumer behavior therefore involves not just understanding how people are using digital technologies – a question that was ripe on people’s minds a decade ago – but understanding how digital technologies are transforming people’s sense of who they are.

The second revolution is in how technology is able to provide *analytics*¹ – the ability to track and measure consumer behavior in this digital space. In the recent past, tracking and measuring took the form of “recognizing” visitors to a website through cookie-ing or other now standard technology. Today, it means knowing how people explore content on the web, on their phones, in emails, on their

¹ For present purposes, we’ll use “analytics” to denote both web analytics that capture website behavior (and increasingly, mobile and social behavior) and BI tools that typically run on top of customer databases that are capturing offline data (e.g., from credit cards, point-of-sale transactions, and call-centers)

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social networks, at their ATMs, when they talk to customer service representatives, when they watch streaming videos, when they play games, interact with their televisions, redeem coupons, buy items in a store, and so on. It means, in short, creating a purported “360 degree view of the customer” across all touchpoints that are enabled by technology.² We’ll describe some of the standard and emerging capabilities in analytics, but the point here is simply that the ability of these technologies to capture online behavior and make predictions from it is increasingly – and, to some, startlingly – sophisticated.

The implications of these two developments for businesses – and the marketers and merchandisers that work in them – are immense. If you want to better understand your consumer in order to provide them more goods and services, you are witnessing a perfect intersection: people are spending more and more time in spaces where their behavior can be observed and tracked with increasing precision. No wonder, then, that CMOs and CIOs are clamoring for improved analytics capabilities. In our line of work – the marketing and IT space – the chorus is deafening. The promise of a complete view of the customer seems within reach. As a Forrester analyst at a recent conference in New York put it: “Customers are complex beasts – in order to completely understand the customer, we need to pull together all the data we possibly can through analytics – and the time is within reach when we can.”³

This demand on the part of clients is met by a rapid flowering of companies that promise real-time, on-demand understanding of consumers – and these companies are being acquired at a rapid pace by global technology and consulting enterprises:

Company	Date	Company Acquired
Accenture	05.18.2010	CadenceQuest
IBM	6.15.2010	Core Metrics
IBM	10.2.2009	SPSS
IBM	11.12.2007	Cognos
Google	3.28.2005	Urchin (now Google Analytics)
Twitter	6.10.2010	Smallthought Systems

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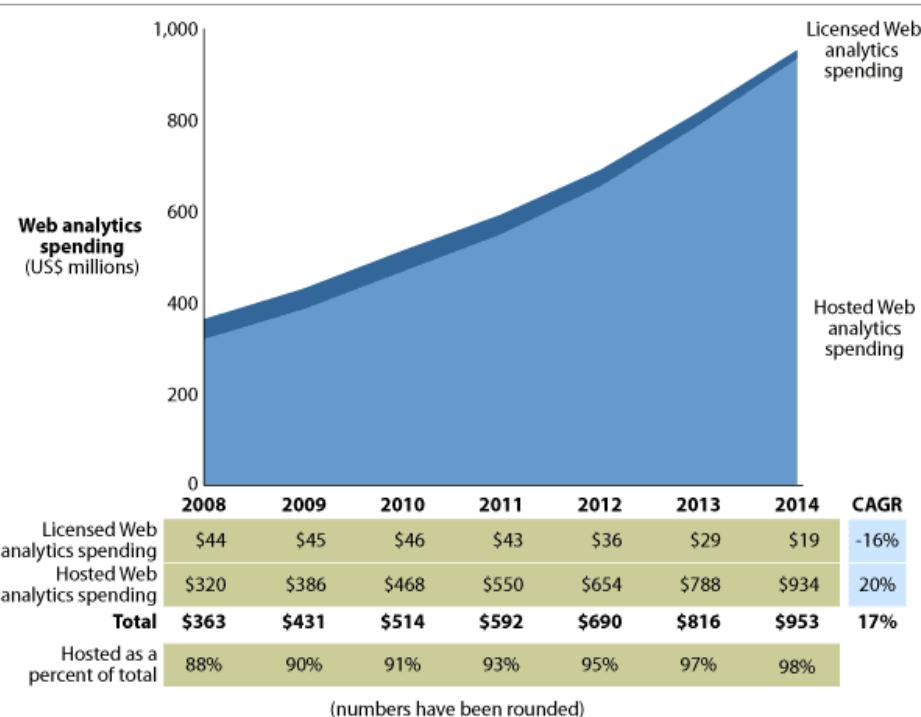
² As an exercise, type “360 view of the customer” into a search engine and note the volume of hyperbolic claims to completely understand customer values and behaviors. Many analytics specialists are careful to describe their work in terms of capturing customer activities and recognize this data represents only a part of a holistic view of the customer.

³“Using Web Analytics Insight To Inform Cross-Channel Customer Interactions”; Forrester’s Customer Experience Forum 2010, June 29-30, New York, New York, USA. As an interesting side note, the phrase “360 view of the customer” was included in the title of several presentations, and was in the authors’ experience one of the most oft-used shibboleths during the entire conference.

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Company	Date	Company Acquired
Adobe	9.24.2009	Omniture
Yahoo	4.9.2008	Index Tools (now Yahoo Analytics)
Microsoft	05.8.2006	DeepMetrix Corporation- Gatineau (now adCenter Analytics)
Microsoft	8.13.2007	aQuantive (Atlas ad serving and analytics)
WPP	02.11.2008	Nuconomy

Spend on web analytics alone is expected to reach \$1B in the U.S. by 2014 – global figures will obviously be much higher.



Source: Forrester Research Web Analytics Model, 3/09 (US)

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Source: Forrester Research, Inc.

FIGURE 1: Forecast of US Web Analytics Spending, 2009-2014

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Universities are also recognizing the increasing primacy of analytics in the business world. Over 20 major universities in the U.S., including MIT, the University of Pennsylvania, and Carnegie Mellon University now have marketing analytics programs. DePaul University in Chicago recently started a graduate program in Predictive Analytics.⁴ As a recent *Business Week* article put it:

If *The Graduate* were remade today, the new buzzword for the young could be “analytics.” Thanks to the Internet, the world has become a swelling ocean full of data. One grand challenge of our age is to find a way to harness that data. And that’s where the burgeoning field of analytics comes in.⁵

In the U.S., the demand for people skilled in analytics substantially outstrips the supply. IBM recently had over 2500 open job postings for analytics-related positions.⁶ Clients are increasingly demanding a robust and comprehensive view of consumer behavior, technologies purport to provide it, and companies are actively looking for people to manage it.

In this growing conversation about applying analytics to enduring questions of customer experience, we have found ethnographic understandings of consumers to have an ever quieter voice. Put differently, the clients we have worked with – including, but not limited to, one of the U.S.’s largest retailers and one of the world’s largest food companies – have increasingly gravitated strongly towards the promise of a “360 View of the Customer”. As people deeply convinced by the value that ethnographic practices can bring to consumer understanding, we have witnessed this development with alarm. We have also successfully fought off the reductive applications of analytics with a number of our clients -- for example, when clients attempt to use transactional data as a simple proxy for the entire customer experience, ignoring customer motivations, attitudes, feelings, etc.). Nevertheless, analytics as a discipline has more and more found the ear of CMOs, CIOs, brand marketers, and merchandisers, and we have had to repeatedly address the question “why do we need anything further?” The old arguments do not convince, and we have found the need for a new way of engaging with the powerful, sophisticated, and valuable set of capabilities that analytics has become. Our question, then, is this: what happens to ethnography in the age of analytics?

EXAMPLES FROM THE FIELD

What do our clients really mean when they ask for a “360 degree view of the customer?” Let’s look at two examples from the field where the context of the question will help clarify what our clients think they want. We will then turn to what we believe they actually need and how we can close the gap between the two.

Example 1: “We know what our customers want”

⁴<http://www.itworldcanada.com/news/dePaul-u-to-offer-grad-program-in-predictive-analytics/140926>

⁵http://www.businessweek.com/the_thread/techbeat/archives/2009/12/want_a_job_analytics_is_the_thing_say_s_ibm.html

⁶ *Ibid.*

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Our first case involves one of North America’s largest “big box” retailers with annual revenues in excess of \$70B. SapientNitro is leading the development of a new eCommerce platform for this retailer, including strategy, creative, and technology (let us call this company “ShopCo”). As one would expect, ShopCo has a very sophisticated Customer Insights organization that conducts consumer research using a variety of quantitative and qualitative methods. One of their primary objectives for the new platform is to design a compelling digital experience based on a deep understanding of their consumers, one that will help create a personal connection to their consumers across multiple digital platforms.

During a planning session prior to entering the concept phase of the program, we were building out a customer research plan to uncover and prioritize user needs that should be incorporated into the design. The plan called for a variety of quantitative (online surveys) and qualitative (webcam diaries, in-home studies, paper prototyping) methods for defining these user needs. In sum, we were devising a standard set of protocols that had proven very effective across many client engagements in conceptualizing breakthrough user experiences.

Towards the end of this planning session, a member of ShopCo’s eCommerce team exclaimed “Why are we spending time learning about our customers in their homes and at their jobs? We know what our customers do – they show us online and in the stores every day!” She then proceeded to list out some of the things they knew about their customers – at a segmentation level, as well as an individual consumer level:

- Purchase history and preference
- Preferred media channels
- Transaction response behavior
- Influence of social media
- Brand affinity
- Loyalty scores

“We know this,” she continued, “When she goes to our website, when she opens an email, when she buys something in one of our stores, when she redeems a coupon online.” Her claims were a bit exaggerated – while ShopCo does indeed have a massive consumer database that captures the types of data above, channel integration is still a significant challenge. But there is no denying that ShopCo is on the path towards a sophisticated data warehouse with associated BI tools.

As the discussion evolved, it was clear that ShopCo’s eCommerce expert wasn’t making the absurd claim that knowing consumers is reducible to categories of data described above. She was making a subtler point that we don’t need to know anything else in order to predict what needs to be predicted – the propensity to purchase – and that the surrounding experience – how the experience is designed, can just be based on design “best practices.” In effect, she was making the claim that understanding *relevant* consumer behavior – behavior relevant to her business – is reducible to the measurement and tracking of this behavior across digital channels. That’s all she needs to “know her customer.”

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There are many ways in which today’s analytics packages support the types of measurement and tracking described above. While it is beyond the purview of our present discussion to go into detail about these various capabilities – indeed, it is one of our claims that it behooves ethnographers to engage in this investigation directly and alongside analytics specialists – an example might help here. Consider the following scenario: “Nancy,” a ShopCo customer, notices her friend on Facebook has become a fan of ShopCo, so she becomes a fan of ShopCo too. She then visits ShopCo.com through Facebook, which is picked up by FacebookConnect’s API and a web analytics software package (e.g., Unica, Omniture, or Webtrends). While at ShopCo.com, she signs up for its newsletter. Later, she is marketed to via email and ShopCo’s eCRM program, and she is assigned a unique key in this email (a means to identify her as a specific customer). Nancy finds the email offer enticing, so she clicks on it and is immediately tracked by ShopCo’s email marketing engine, which sends out a “thank you” page that contains a conversion pixel – which, in turn, ascribes a “call to action” confirmation that becomes attached to her primary key. When Nancy scans a coupon using her mobile phone on one of ShopCo’s optical scanners, this data is also added to her primary key. When she phones ShopCo’s call center to initiate a return because she didn’t like a product, this, too, is tracked and added to her profile.

This tracking and measurement continues over time across multiple interaction points, leading to an increasingly rich picture of Nancy’s interests, propensity to respond to marketing, and, ultimately, her contribution to ShopCo’s bottom line. Multiply the data collected on Nancy by millions of customers, and ShopCo starts to formulate sophisticated predictive models of segmented consumer behavior, which are continually updated by the stream of further analytics data pouring in. Add to this the data from third-party cookies,⁷ and soon we have a tremendous amount of online behavior is tracked and monitored. The appeal to marketers is clear.

The purpose of this example is to illustrate the allure of analytics in solving a problem that marketers face – how to quickly gather data about consumers and how to predict based on the aggregation of this data. Our intent is not to argue that analytics provides a compelling and definitive answer to the question of how to understand customer behavior, only that the current focus on data and measurement *has* largely usurped other conversations about “understanding the customer.” We offer below some suggestions on how to recast these conversations in the service of ethnography. For now, we turn to one more example – one which shows how analytics offers to solve another problem – one of narrowing in on what consumers want.

Example 2: “Test and Learn!”

⁷ Third-party cookies are one way to track a user’s browsing behavior across multiple sites, not just those owned by a specific domain (in our example, say, ShopCo.com). These third-party cookies are commonly used by online advertisers and are typically anonymous (i.e., they contain no private information about a specific user).

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Our second example comes from a large food company based in North America (let's call them "Great Grains") – one that manufactures and markets consumer packaged goods around the world. Because their products are sold through retailers (grocery stores or big box retailers like ShopCo in the above example), they invest heavily in relationship marketing. The focus of this marketing strategy is to build direct relationships with consumers, since the point of purchase consideration is "owned" by intermediaries. To do so, they try to learn as much as possible about what is of importance to their target customer base. Historically, they have invested heavily in a blend of customer research – including quantitative and qualitative market research and ethnographic-based studies.

SapientNitro was engaged by Great Grains to define a new collection of digital food experiences. These food experiences (an iPad app, a mobile app, and a set of Facebook groups) were to be geared towards food lifestyles. One example of such an experience might be "cooking adventures," which would provide content on new tastes from around the world, trendy ingredients, and so on. Imagine reading about such adventures, getting inspired to explore similar tastes, and ultimately purchasing the right ingredients (some of which would, of course, be Great Grains products). The concept is, of course, standard blog-based marketing. What was new for Great Grains was the idea of moving away from the recipe as the dominant form of digital content to a much broader concept of food-related interests.

To be successful, it was obviously important to match the right content to the right audience. In order to do this, we proposed a program for conducting a short burst of ethnographic-based research (in-context shopping studies, virtual panels) alongside a basic market survey analysis and some secondary research. The intent of this research was to uncover real, compelling interests and needs for the audiences they were targeting.

Throughout the proposal development process, it quickly became evident that the client had little patience for either form of primary research. His repeated challenge to us was: "Why don't we just test-and-learn?" What he meant by this was: we don't need to know what interests and motivations our consumers have, beyond what we know from existing market research. We can simply try out ideas on our audiences, measure the impact of the content, design, and features with very fine granularity. Moreover, we can run simultaneous multivariate tests that provide robust, statistically-significant results. These results will be available to us in near-real-time. Finally, we can provide ongoing monitoring and measurement to see how our consumers are responding over the course of time.

The point of this example is to indicate how the terrain of the discussion has shifted to a purely functional understanding of consumer needs: a "360 view of the customer" is defined, not as a deep understanding of the consumer, but rather as a functional measure of what is successful, and what isn't. Success here is determined not by tapping into unmet needs, or understanding cultural influences, or uncovering contexts of use. It is determined by clearly measurable KPIs: number of emails opened, dwell time, page abandonment rates, number of Facebook likes, number of link-shares, and so on.

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At the end of the day, our proposal for Great Grains was transformed into a project to better define these KPIs and tap into analytics capabilities for tracking and reporting on them. Our point isn’t that we failed to provide a compelling picture of the value of ethnographically-based consumer insight – though that may in fact have been the case. Our sense is, rather, that the conversation has changed.

THE OPPORTUNITY

Our description of analytics overshadowing ethnography certainly must remind of an old argument pitting qualitative versus quantitative methods. If this is just another case of words and pictures coming up against cold, hard numbers, why don’t we simply draw out our trusty, rhetorical toolkit to argue for the distinctive value of contextual research? To a certain extent, ethnographers have vacated the field and let analytics experts make the case that they capture what people do, not just what people say they do, synthesize insights from complex, real world behavior and draw on a range of behavior over time (in real time) instead of capturing snapshots of experience.

And yet, the opportunity for ethnography is to understand the sophistication of contemporary analytics programs and reveal where gaps exist. As in our Great Grains example, corporations deploy analytics to enable micro-adaptations of business operations, calibrated continuously via feeds of customer data. If an email campaign doesn’t lead to results, modulate the message and run another trial. But what if the more relevant and impactful way to reach the customer is not by email, but at the retail store or during an event? Ethnography can connect what consumers are doing “between” digital interactions. We must seek out ways to insert ourselves, while recognizing the power of analytics.

As the ShopCo and Great Grains examples illustrate, we found ourselves – as ethnographers – already on our heels when first meeting with clients to choose how we would learn about and design for their customers. We needed a way to recognize the value of analytics while improving the ability of our clients to gain insights from the data gathered.

One way we have tried to use ethnography to enter and improve the data conversation (i.e., to broaden the set of data inputs) is via a “consumer ecosystem map,” which situates data points (demographics, media preferences, brand choices, aggregated data from online behavior, etc.) within the context of attitudes and motivations, activities, and cultural trends. The model itself provides a snapshot – an abstraction from richer detail available in customary reports and Power Point documents. In figure 2, for example, an “intense baker” is characterized thinly, but usefully for creative directors, brand strategists, customer experience managers, and others. A few quotes from interviews represent how this customer segment thinks, selections from analyzing Simmons data appear as magazines frequently subscribed to, and trends from secondary research are listed to remind of which technology this consumer might adopt. While this ecosystem map alone does not provide the rich detail and narrative of an ethnography, it is an effective counterweight to an excel spreadsheet that contains vast amount of data about relatively narrow behaviors within a much larger experience. Instead of attempting to read “insights” directly from a data “dashboard” – people populating this map must abstract the key “data points” believed to be the most compelling. They must argue over what evidence best represents the customer’s experience.

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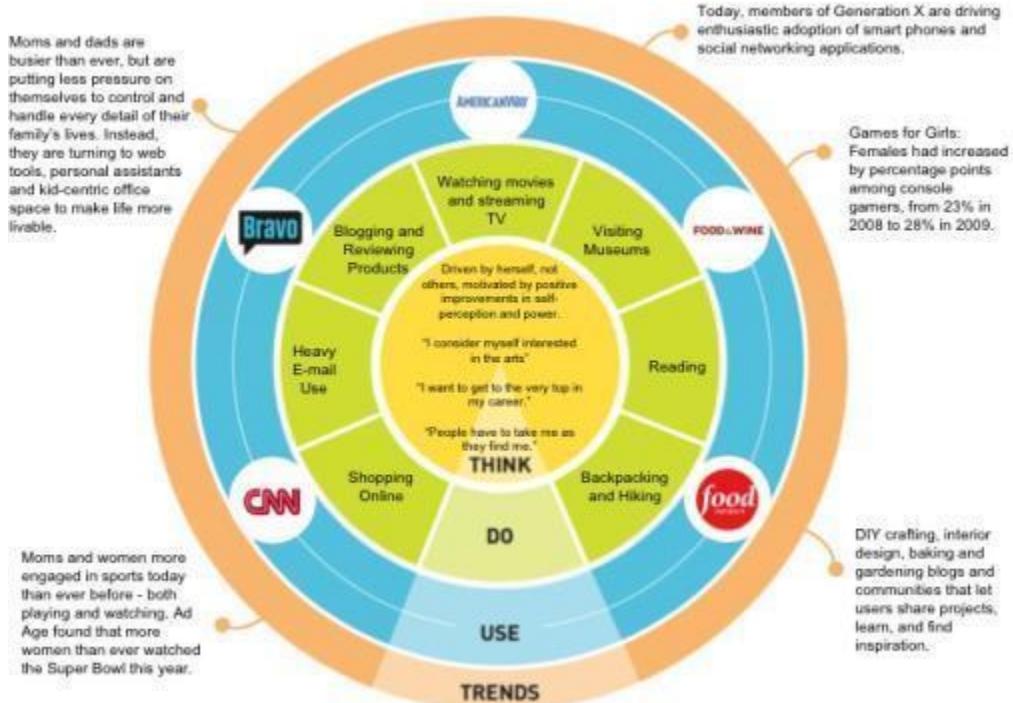


FIGURE 2. Intense baker: Customer ecosystem model

In a similar effort to add useful context to data -- as part of a project to understand the role of media in everyday life (in this case data being logged every 10 seconds from handheld devices over the course of a week), Alice Sylvester at Sequent Partners created an ecosystem map derived from a range of contextual inquiry methods and MRI media data.⁸

Consumer ecosystem maps apply multiple research methods and integrate qualitative and quantitative approaches. But, more importantly, they serve as boundary objects catalyzing conversations between corporate and client stakeholders about what moments matter to customers and how best to marshal resources for enabling or communicating with them. As an ecosystem map is drawn from ethnographic research as well as a wide range of data sources, media sources, surveys and social listening audits, etc., creating the map requires a lot of people from different departments to work together: data modelers, social listening monitors, ethnographic researchers, media analysts,

⁸ “A Multi-Dimensional Media Research Tool Full of New Possibilities For Cross-Media Planning & Buying”, Alice Sylvester, Advertising Research Foundation 360 Measurement Day workshop, May 25, 2010.

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market researchers, brand strategists, experience designers, etc. In our own agency, different departments focus on different layers of this ecosystem map, populating the data points most relevant to their own domain (e.g., experience researchers establish what customers are thinking, feeling, doing, and using; media planners draw on Simmons data to identify what magazines the customer reads or

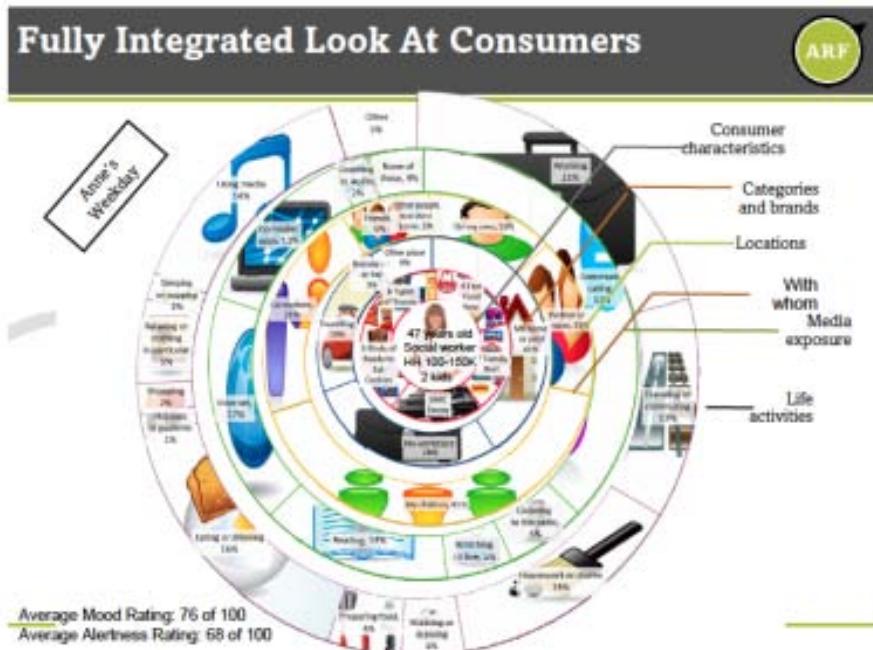


FIGURE 3: Fully integrated look at consumers

what TV shows they watch; social media monitors use tools like Sysomos and Radian6 identify where customers convene online and which bloggers they read, other key performance indicators from point-of-sale terminals can be added by data analysts, etc.) The final map is then used to inform strategy and inspire creative ideas and messaging.

Establishing the framework of an ecosystem itself required the interpretive contribution of “experience researchers”, who were accustomed to building “experience models” based on ethnographic research. Much more can be done to build on the “experience modeling” legacy. Ecosystem maps, for example, present only a static snapshot of a target customer segment within a larger context. Other types of experience models -- customer journey maps, opportunity maps, channel models, mode models – would be seen as increasingly relevant with a deeper infusion of different types of data. At the same time, evolving these models in collaboration with analytics experts and data modelers would bring to life stories of experience absent from current attempts to capture “holistic

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customer experience,” opening up ways to explore what the data means beyond how to optimize discrete marketing tactics.

Ecosystem mapping and other means of engaging the “360 degree view of the customer” require that researchers – experts in traditional corporate ethnographic and contextual inquiry methods – learn the methods and aims of data analysis, modeling, and strategy – the domain of the Data and Analytics department – in order to partner with data experts and improve the conversation across disciplines. Experience researchers can also draw upon a tailwind encouraging intra-department conversations: the language of “digital anthropology” permeates the contemporary field of community intelligence and social listening, emphasizing the importance of “being there” even if “there” is a digital place.

We see three paths down which the increasing primacy of analytics could lead. First, we could stay out of the conversation, enabling our clients to view “consumer understanding” as the domain of analytics – nothing else is needed. We think taking this path would be foolhardy, but we cannot be so sanguine as to rule it out as impossible. Second, ethnography and other forms of qualitative research could mount a robust critique that reveals the lacunae in analytics-driven insight. This path will undoubtedly be taken by some, but we who work with marketing and IT organizations have not found this to be a productive course of argument. It will likely fail given the lack of connection to meaningful ROI and the need for web and other tool-based optimization. Third, ethnographers could drive, in partnership with data strategists, a more holistic approach to consumer understanding that engages analytics as one critical input into its interpretive frameworks.

We view the last path as the most fruitful. Analytics has emerged with the potential to reveal aspects of behavior untapped to date. And ethnographers are well positioned to represent consumers’ increasingly digital life due to our proximity to customers in context. To join forces, we have to experiment with new ways of executing and representing our research. To have the ear of data-minded, analytics-driven clients, we must do more than richly describe people using mobile phones, tweeting, and being “social.” As people’s lives unfold along the digital dimension, the promise of ethnographic research in corporations is to generate the frameworks and narratives required to make sense – and value – of the data being generated, captured and mined. And we must mobilize these frameworks collaboratively across capabilities. Ethnographers in the corporate world must continue to focus on our interpretive value: our ability to help reframe business problems and to situate discrete pieces of information in their larger context. But this is something we have always tried to do. What is new, we’ve argued, is the need to engage analytics and analytics teams in the conversation about “customer insight” – about the “360 view of the customer.”

Keitai, Blog, and Kuuki-wo-yomu (Read the atmosphere): Communicative Ecology in Japanese Society

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In mobile communications studies, Japan is known for its “keitai culture.” However, the actual use of keitai among the Japanese is anything but glamorous. On the other hand, strong preference of online diary and diary blogs among the Japanese is remarkable. What is puzzling, however, is that the Japanese online diarists and bloggers have been astoundingly self-effacing. What communications are they engaged in, with providing little information about themselves? Relying on and advancing the methodological perspective of “communicative ecology,” this study discusses the way online diaries and blogs are intertwined with mobile communications, embedded in the communicative ecology. It also reveals the way “kuuki wo yomu” (read the atmosphere) motivates people’s expectations and actions in social communications, contributing to the formation of the communicative ecology.

Japanese society and *keitai* culture

Japan is one of the most advanced information societies. In terms of social diffusion of ICTs, the commercialization and social diffusion of advanced ICTs, such as FTTH and 3G mobile phones, has been astounding in Japan along with Korea, compared with other industrialized societies, in the latter half of the 2000s. Particularly, Japanese society is known for its “*keitai culture*” in mobile communications studies. As is well known, it was NTT DoCoMo that was the world’s first mobile carrier to set out the commercial services of 2.5G and 3G. “I-mode,” 2.5G internet-enabled mobile service, started in February 1999 and FOMA, 3G service,¹ was launched in October 2001. Since then, a great variety of advanced features has been developed and commercialized in Japanese market. Color displays and polyphonic ring tones were commercialized in late 1999. Music player functionality debuted on the market in 2000, and camera-embedded handsets, along with picture mailing services in late 2000. In early 2001, handsets capable of downloading java applets were introduced, enabling applications to run on the handset without further downloads. The infrared communication function in 2002; an application for reading QR Code, a two-dimensional bar code, which can store URLs and other character information and enables users to obtain such information by means of a mobile phone’s camera, was implemented in 2003; handsets equipped with a contactless IC-chip that acts as electronic money, electronic tickets, debit cards, credit cards, and so on in 2004; a song-downloading function in 2004; a GPS function in 2006; and a one-segment terrestrial digital TV broadcasting service for mobile devices² in 2007.

In addition, Japanese love of text messaging is an integral part of *keitai* culture, ‘one of the

¹ FOMA, Freedom Of Mobile multimedia Access, is the brand name of 3G mobile telecommunications service developed and provided by NTT DoCoMo.

² This service is called “One-Seg” because the bandwidth of the single channel (6 MHz) allocated to each broadcaster is divided into 13 segments, and one of those segments is used for mobile devices.

distinctive features of Japanese youths' *keitai* use' (Okada 2005: 49). Especially, the way to make text messaging is intriguing. The Japanese characters are composed of four distinct systems: *Hiragana*, *Katakana*, Chinese characters, in addition to the alphanumeric system. Thus mobile communications carriers developed a system in which a specific combination of two-digit numbers corresponds to a specific Japanese phonetic symbol. For example, the combination of 2 and 1 indicates *ka*; 3 and 4 means *se*, and so forth. Then, *kana-kanji* conversion was also developed and implemented. Thus, when sending messages, Japanese users have to manipulate this code-specific system and the system of two-digit number combinations. Furthermore, Japanese mobile phones are equipped with special characters or symbols like cm (centimeter), arrows, musical notes, astrological symbols and so forth. People have to switch different modes of characters and symbols pushing specific buttons. However, Japanese youth rapidly mastered these protocols, developing skillful fingertip manipulation in order to push the buttons of mobile handsets with amazing dexterity. Such dexterous manipulation of mobile handsets is called “*oyayubi* literacy,” “thumb literacy,” and some young Japanese are called “*oyayubi zoku*,” or the “thumb group” in *keitai* culture.

Furthermore, young Japanese are innovative in that they manipulate sets of characters and symbols to make up literally thousands of emoticons that convey subtle nuances of their feeling and they utilize special symbols to refer to anything but their original meanings. For example, a variety of emoticons to convey subtle feelings have been devised, such as (-_-;) and (-_-*) to refer to embarrassed feeling, m(_ _)m to mean sincere apology and the like. For another, some come to use the astrological symbol for Libra (♎) to refer to puffed rice cake (*mochi*) and the new year's day, because the symbol resembles a piece of puffed rice cake (*mochi*) and *mochi* is usually eaten on the new year's day.

Such dexterous use of text messaging on the mobile phone dates back to the time numeric pagers began to be used among the young in the mid 1990s. The deregulation of telecommunications market and harsh competition lowered the cost of pagers then and the Japanese youth began to use numeric messages to communicate everything from greetings to everyday emotions. Most were based on various ways numbers could be read in Japanese, such as 4-6-4-9, which is pronounced as yo-ro-shi-ku, "hello," "best regards," 3-3-4-1, pronounced as sa-mi-shi-i, "I feel lonely," and so on.

Therefore, Japanese scholars have paid careful attention to the use of mobile devices among the Japanese, especially youth, since the mid 1990s. Text messaging is certainly a novel form of social communication. It allows people to perform the asynchronous yet instantaneous exchange of messages, freeing them of location and time on either side of the exchange. Japanese scholars have investigated the way text messaging facilitates new norms and network formations of interpersonal relationship and group activities among people, especially the young and they claim the rather uniqueness in Japanese use of mobile communications devices. For example, Mizuko Ito points out its distinctiveness as follows.

In contrast to the cellular phone of the United States (defined by technical infrastructure), and the mobile of the United Kingdom (defined by the unfettering from fixed location) (Kotamraju and Wakeford 2002), the Japanese term *keitai* (roughly translated, “something you carry with you”) references a somewhat different set of dimensions. A *keitai* is not so much about a new technical capability or freedom of motion but about a snug and intimate technosocial

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tethering, a personal device supporting communications that are a constant, lightweight, and mundane presence in everyday life. [Ito 2005: 1]

In other words, Japanese society can be regarded as one of the pioneering societies in the development of “Smart Mobs.” In fact, Rheingold begins his seminal book “Smart Mobs” with reference to Tokyo and Shibuya Crossing:

The first signs of the next shift began to reveal themselves to me on a spring afternoon in the year 2000. That was when I began to notice people on the streets of Tokyo staring at their mobile phones instead of talking to them. Since then the practice of exchanging short text messages via mobile telephones has led to the eruption of subcultures in Europe and Asia. At least one government has fallen, in part because of the way people used text messaging. Adolescent mating rituals, political activism, and corporate management styles have muted in unexpected ways. My media moment at Shibuya Crossing was only my first encounter with a phenomenon I've come to call “smart mobs.” [Rheingold 2001:xii]

SLUGGISH JAPANESE SMART MOBS: LIMITED USE DESPITE WIDE AVAILABILITY OF ADVANCED FEATURES

Certainly, advanced 3G mobile network, the incessantly introduced novel features of the mobile handset, the dexterity of users, *keitai* groups, and the changes in interpersonal relations that *keitai* has brought about may well be dazzling and call for detailed research. However, as mobile communications have become a large part of people's lives across many societies during the 2000s, and in the current context, the way the Japanese use mobile phones has turned out to be anything but glamorous.

In most societies, text messaging has played a critical role in widespread use of mobile communications. “There has been much fascination in studying, cataloguing, and debating the varieties and intricacies of text messaging, and how it has modified social, media, and cultural practices” (Goggin 2006: 66). Castells and others argue that text messaging could challenge existing social norms in public spaces and traditional power structures in families, schools, friendship networks, and workplaces (Castells et al. 2006).

Certainly, in the Philippines in 2001, a large number of people gathered to protest the corruption of President Joseph Estrada at the EDSA Shrine, where Ferdinand Marcos was overthrown by People Power Revolution in February 1986. The protesters were emergently self-organized via text messaging and their number was growing rapidly, forcing Estrada to be removed from office. Obama used a combination of SMS text messaging, mobile Web site, interactive voice response, mobile video and mobile banner ads to reach out to a great number of voters in his presidential campaign.

However, there are no such social movements among the Japanese Smart Mobs. Even though mobile internet enabled handsets equipped with a great variety of advanced features are spread widely in Japanese society, *keitai* is predominantly used for leisure or practical purposes particularly while commuting such as, public transportation timetables and accident reports. *Keitai* use for social

communications is significantly limited.

According to the national survey conducted in January 2010³ by World Internet Project Japan, which I have been engaged in as a project member⁴, 55% of *keitai* users take pictures more than once a month. 53% have ever used ringtones or ringsongs, 30% games, 25% one-segment terrestrial digital TV broadcasting service. 56% have ever used weather forecasts, 32% transit information of public transportation. Whereas business wants to stimulate the use of advanced features and contents, few have caught on. The use of transaction services such as mobile banking, e-learning services or political engagement is almost none. So ARPU (average revenue per user) reached its peak in 2002 and has been declining gradually since then in Japanese *keitai* market.

When it comes to the use for social communications, 16% of *keitai* users access social networking sites via the mobile phone more than once a month. Most are in their teens and twenties. 45% of teenagers answered they used social networking sites via the mobile phone, 43% in the twenties, 15% in the thirties and almost none in the forties and above. What is astounding here is that the Japanese are remarkably self-effacing on social networking sites, which will be explored later in detail. They rarely put their real name, e-mail address, or portrait there. That is, social communications via social networking sites are primarily among those already acquainted with each other. Those who use social networking sites to expand their social network are considerably few. Based on the field researches and social surveys I have been engaged in, only 10% of the Japanese who use social networking sites have the experience to know anyone via online and to come into contact with each other, compared with 40 to 50 percent of the Koreans and the Finns in the latter half of the 2000s.

This observation is true to the use of text messaging on the mobile phone. Among the Japanese, SMS is used exclusively among family members; due to the early adoption and widespread of 2.5G network like i-mode, the Japanese users of the mobile phone send and receive Internet e-mails as a default means of text messaging. When I conducted a research on college students in Tokyo, Seoul and Helsinki along with household study in these three cities in 2002 and 2003, the average number of e-mails the Japanese college students sent a week reached 60 (that of the Koreans also reached 60 while that of the Finnish was 17). In an ethnographic research project I conducted in Japan from 2007 to 2009, which will be discussed later, 45 people from teenagers to seventy year olds participated (2 high school students, 28 college students, and 5 each of those in their thirties, forties and aged 50 years old). I asked them to document their use of various ICTs and mass media for four days and made interviews three times for each participant. The simple average number of text messages sent via the mobile

³ The sample of the survey is 525 Japanese nationwide, aged 15 to 69. Geographically segmented random sampling and direct-visit and self-completion questionnaire was used. The survey was funded by ICF, International Communications Foundation, and ICR, InfoCom Research Inc.

⁴ WIP, World Internet Project, was founded by the USC Annenberg School Center for the Digital Future (formerly the UCLA Center for Communication Policy) in the United States in 1999. As of 2008, WIP has more than 20 partners in countries and regions all over the world, including Singapore, Italy, China, Japan, Macao, South Korea, Sweden, Germany, Great Britain, Spain, Hungary, Canada, Chile, Argentina, Portugal, Australia, Bolivia, Iran, and the Czech Republic. Some Japanese scholars started to participate in the project and formed the World Internet Project Japan (JWIP) in April, 2000. I joined JWIP in 2008. <http://www.worldinternetproject.net/>.

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phone among those 45 participants was 7.5 per day, and that received was 10.4 per day. Almost all of the e-mails via the mobile phone were either exchanged between those already acquainted or junk mail. They were afraid of any message from strangers. Therefore, as far as social communications over the mobile phone are concerned, they tend to enclose their online communications within those already acquainted. Thus, Japanese Smart Mobs have never generated such social movements as the one in the Philippines or in the 2008 U.S. presidential campaign.

Moreover, what is particular about social communications among the Japanese is that people avoid synchronous voice communications via the mobile phone or fixed landlines. Whereas 95% of Korean and Finnish college students said they make voice communication via the mobile phone at least once a day, so did only 55% of Japanese college students in my comparative research in 2002. According to the ethnographic research mentioned above, the simple average number of outgoing voice calls via the mobile phone was 0.7 per day and that of incoming voice calls was 0.9 per day. Those with whom the participants make frequent voice communications are limited to only three or four persons, i.e., their family members and very close friends, usually significant others. In other cases, they make voice calls for business reason. Even between friends few voice calls either via the mobile phone or via the fixed land line are made. Many young Japanese said that they would first send a text message to ask friends for permission before making a phone call.

COMMUNICATIVE ECOLOGY APPROACH AND CEP, CYBER ETHNOGRAPHY PROJECT

Keitai studies mainly highlight the expansive and innovative use of *keitai* and interpersonal relations brought about by *keitai*, while putting emphasis on the divergence from the past. I believe we need such an approach since ICTs and their use, purposes and efficacies are not something that we can take for granted or which definition and manner of use we are born knowing. It is necessary to probe incessant changes of people's behaviors and attitudes, social communications and relationship and their meaning in socio-cultural contexts in accordance with the development of ICTs.

At the same time, I would like to contend that what is discussed in the previous section tells us that we need a different approach as well. That is, it is necessary to situate *keitai* in a broader “communicative ecology” in order to understand the communications the Japanese engage in.

“Communicative ecology” is the concept Miller and Slater (2000) proposed. They claim that “as a methodological approach, [communicative ecology] is concerned to assemble the full range of (symbolic and material) communicative resources, and the (social and technical) networks into which they are organized, in order to identify communicative structures, constraints and potentials” (Slater 2005:1). This approach defines ICTs broadly to include not only new mobile and digital media, but also analogue media and offline social communications, and puts the focus on their interrelation and social contexts of use.

Theoretically, the approach prevents us from assuming the simple disruption of innovative ICTs from the past. Certainly, successive innovations in ICTs represent major social events, which require people to figure out how to deal with the changes. The way people engage in social communications

and form social relations can be quite different from those of the past. However, people may well rely on culture to make sense of ICTs as they figure out, how innovations can be used, and what benefits and risks they will bring to each individual and society at large. When technological diffusion takes place, the more novel and innovative the technology, the greater the social necessity for culture to work to understand what that technology is and what is going on with its development and diffusion.

Culture in this case is considered as a large set of representations, or tools of thought. They have various generative capacities that help to structure or frame people's experiences. Such representations enable the members of each culture to make something new comprehensible by means of operating existing representations metaphorically, to motivate people to behave in a certain way by providing meaning for the behavior or goals for action, to recognize deviant cases, to anticipate what will come next, and so on. Though culture must be shared intersubjectively by a cultural group, the extent to which each representation is shared in terms of coverage, depth, strength and persistence varies considerably. Therefore, most representations should be of a vast array of intracultural variations as Sperber (1985) suggests in the argument of the epidemiology of representations.

Then, it is ethnography that plays the most significant role in investigating such representations associated with ICTs being embedded in social activities, constituting a social environment. In their seminal dialogue, Newhagen and Rafaeli (1995) argued that “defining the Internet is largely a function of the constraints we name when we conceptualize it.” In a similar vein, Christine Hine raised the issue of the Internet as cultural artifacts in her stimulating work (Hine 2000, 2008). Contexts and meanings of Internet use are too abundant to fix or anchor; even if fixed once, they always escape from existing understandings, developing into others. Thus, quantitative methodologies can hardly capture the emergent properties of such contexts and meanings, whereas ethnography works to find out and fix, if temporal, objects of cyberspace, people's perceptions and conducts relevant to study. Group interviewing, diary studies and other forms of ethnographic research to collect people's perceptions, feelings, experiences, thinking, categorizations, expectations, reflections and (mis)understandings in their use of various ICTs are essential to discover and refine “objects” and significant cultural representations.

Based on such a methodological and theoretical orientation, I have been engaged in developing an ethnographic research project to explore the communicative ecology of Japanese society since 2007, which I call Cyber Ethnographic Project, CEP. The objective of the project can be formulated as exploring a complexity of communicative ecology among the Japanese, while searching for representations powerful enough to contribute to developing the communicative ecology. CEP owes much to my collaboration with researchers of both academics and industry.

As mentioned before briefly, 45 people participated in CEP. I asked them to document their records at least for four days. The records include access to web sites via PC and that via the mobile phone, e-mails they receive and send via PC and those via the mobile phone, out-going and in-coming voice phone calls of the fixed land line and those via the mobile phone, watching TV, listening to radio and music, reading magazines, where they were, and whom they got in touch both online and offline. Out of 45, 31 participants used a social networking site. They were asked about their friends and how they got in touch with them through different communication channels. I met with each participant

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three times and asked them, what feelings and thoughts they had when they accessed specific sites and interacted with people for each occasion. As a result of this research design, it is possible to identify with whom they got in touch, through which communication channel, and with what thought or feeling. Furthermore, in order to find out the relative position of the participants among the Japanese, a survey questionnaire was prepared. All participants answered it and the questionnaire has been incorporated into several national surveys and surveys on college students I have been engaged in.

CEP has grown out of my previous research activities. Most relevant is the comparative study of Tokyo, Seoul and Helsinki, which was mentioned briefly before. Since it compares Japanese society with Finnish and Korean ones, I call it JFK study. The JFK study is a series of qualitative and quantitative research projects conducted through the collaborative efforts of Japanese, Korean and Finnish researchers from 2002 through 2007.⁵ Even though Japan, Korea and Finland are all "advanced information societies," comparable to the United States, considerable differences in various ICTs' diffusion and use were observed, which made me aware of the necessity to investigate the "plurality of information societies" (Castells ed. 2005) and to pay careful attention to socio-cultural contextualization of ICTs. For such an investigation, a comprehensive and aggregative analysis of fine grain based on a wide variety of empirical studies in different societies is vital. This recognition led me to develop CEP.

CEP along with JFK study suggests that online diaries and blogs are intertwined with mobile communications, embedded in the communicative ecology. It also reveals the way "*kuuki wo yomu*" (read the atmosphere) motivates people's expectations and actions in social communications, contributing to the formation of the communicative ecology. I would like to explain these points in the rest of the article.

STRONG ATTITUDE OF CAUTION TOWARD CYBERSPACE, AND DOMINANCE OF ANONYMITY

As we have seen, Japanese Smart Mobs make little use of advanced features of *keitai* and they engage in social communications with those already acquainted with each other. The same is exactly true of the way the Japanese use PC-base Internet⁶. Japanese society enjoys the fastest broadband

⁵ In JFK study, different methodologies, i.e., social surveys, household study, group interviewing, in-depth interviewing, diary study, have been deployed. For example, a household study was carried out in 2002 to 2003. 15 households and 43 members in Tokyo, 9 households and 28 members in Seoul and 9 households and 23 members in Helsinki participated. They were asked to keep record of the use of the Internet and the mobile phone on two days and an in-depth interviewing was made once for each household, not all the members who kept their records. Social surveys were conducted twice. The one was conducted on college students in 2002. The sample was 487 students in Tokyo, 490 students in Seoul, and 315 students in Helsinki. The other was on 455 inhabitants in Tokyo 23 special wards, aged 20 to 69, 1013 inhabitants in Seoul 25 special wards, aged 20 to 69 and 1307 inhabitants in Finland, aged 15 to 29. The survey in Tokyo and Seoul was conducted in November to December 2005 and that in Helsinki was in May to July 2007.

⁶ In this article, a PC includes a mac and PC-based Internet means any internet connections using a PC or a mac via either a wired or a wireless connection. In contrast, mobile internet refers to the Internet connection via the mobile phone handsets alone.

Internet connection at the lowest cost and the highest diffusion of FTTH among broadband subscribers. Many advanced services are invented and put in commercial use. However, the actual use is not so diversified or active as in other societies. Mikami, the leader of WIP Japan, conducted a principal component analysis of the social differences in online activities and services in Japan and twelve other countries where WIP surveys were conducted in 2007, i.e., Australia, Canada, China, Colombia, Czech Republic, Hungary, Israel, Macao, New Zealand, Singapore, Sweden, United Kingdom, and the United States (Mikami 2009). Eighteen items of online activities and services, which are classified into five categories,⁷ are selected and their use rate for each society among Internet users is put into principal component analysis. The result shows that Japan is the most inactive in online activities or use along with Colombia.

CEP and other studies consistently prove that the Japanese use the most advanced and sophisticated ICT environment mostly for seeking information for consumption, for watching videos and downloading music for fun, for peeping into BBSs dominated by anonymity, and for making social communications with those already acquainted. The Internet is rarely used for social participation, political engagement, accessing to online government, online transactions, online learning, telemedicine, self-expression, or expanding social networks. Just as the use of voice phone call is remarkably limited, so are synchronous communications such as Skype, instant messaging and online chatting via PC-based Internet among the Japanese.

What has struck me the most about the way ICT is used in Japan is the strong apprehension towards cyberspace at large. A large number of participants are afraid that others will come to know the web sites one has seen and what one writes in e-mail messages, that one's passwords necessary for various Internet uses will be stolen and abused, and that one is likely to be slandered on the Internet.

Along with such a cautious attitude toward the Internet as a social communication medium is a strong concern with online encounters and recognition of the Internet as an anonymous communication space. Korean people involved in cyberspace use their real names. Social networks in the real world and in cyberspace overlap and reinforce one another and cyberspace functions as a means of communication and social activity. As is widely known, the reigning service in Korean internet use is the “community site.” Community sites such as “daum” (www.daum.net) and “cyworld” (www.cyworld.com) have more than 10 million registered users and millions of communities. People are expected to disclose themselves and use their real names (see also Kim 2004).

In contrast, among the Japanese, cyberspace is dominated by the notion of “anonymity”; people tend to avoid being involved in social communication over the Internet. When they engage in social communications on BBSs, blogs or social networking sites, they prefer to be anonymous and they do

⁷ The 18 items are e-mail, instant messaging, and chat for the category of communication services, looking for news, travel information, looking for jobs or work, and health information for the category of information services, online games, downloading or listening to music, downloading or watching videos, and sexual content for the category of online activities for fun, purchasing, paying bills, travel reservations or bookings, and online banking for the category of e-commerce and transaction services, and looking up the definition of a word, finding or checking a fact, and distance learning for the category of online learning activities.

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not disclose much about themselves, which will be discussed further in the next section. Therefore, even among the Japanese who use online communications, the dynamics between social interaction in cyberspace and that in the offline lived-in world are inclined to be lacking and online world and offline world are divided from each other despite wide availability of advanced technologies. For example, as to the offline meetings of community sites, almost all community sites held offline meetings in Korea; in Finland, one half, and in Japan, a third. Furthermore, the Japanese are the least likely to participate in offline meetings. I have asked whether there was any person whom the participants or the respondents of a survey get to know online. The result is consistent: while around half of the Korean and the Finnish have at least one person whom they have gotten to know online and come into contact with via e-mail or telephone, only one out of six to ten Japanese have such a person.

In terms of the dominance of anonymity in cyberspace among the Japanese, anonymous edits of articles in Wikipedia are telling. An edit of an article in Wikipedia can be made either with the name of the registered account or anonymously; in the case of the latter, the IP address from which the anonymous edit is made is recorded and shown on the article and its edit history. I collected the data from Wikipedia sites of several different languages with substantial numbers of users. It turns out that Japanese Wikipedia is outstanding in that the number of anonymous edits is almost half of the total edits. This is even more astounding because even English Wikipedia, where the most heterogeneous population is likely to gather and vandalism reigns over a great number of contentious and divisive articles, only 30 % of total edits are anonymous. In other populous language versions, the rate of anonymous edits is from 10% to 20% mostly.

SELF-EXPRESSION WITH STRONG SELF-EFFACEMENT ON PERSONAL HOMEPAGES, BLOGOSPHERES AND SOCIAL NETWORKING SITES

In spite of the limited use of the Internet as a communications tool, there is a medium the Japanese make considerable use of when compared to the Koreans and the Finns. That is online diary and diary blog. In JFK study in 2002, in order to examine the use of personal homepages as a self-expression and social communication medium, we asked the respondents of the JFK study whether they had their own homepage and what kind of information they had on it. The percentage of those with their own homepage was 10.1% in Japan, 13.3% in Finland and 25.3% in Korea. Clearly, the Japanese were the least active. Two findings made us curious. The one was that the Japanese students surveyed are astoundingly self-effacing. They did not put their real name, e-mail address, portrait, telephone number, or family on their homepages. The other was that there was one item the Japanese who possessed their own homepage made more use than the Koreans and the Finns: diary. Based on the results of different surveys conducted in the early half of the 2000s, more than half of Japanese homepage owners said they had diary on their homepage (less than one-third of Korean owners and a tenth of Finnish owners had diary), even though the number of homepage owners in Japanese society was limited (around one out of ten internet users).

In fact, such a strong presence of online diaries or online journals on personal homepages among the Japanese has drawn much attention from certain Japanese social psychologists interested in CMC. For example, Kawaura, Kawakami, and Yamashita, pioneering scholars in this line of research, conducted a rather comprehensive survey on online diarists in Japanese as early as 1997 (Kawaura ed.

1998), well before Philippe Lejeune's "Cher Ecran ...: Journal personnel, ordinateur, Internet" (Lejeune 2000), which is regarded as the groundbreaking and profoundly influential work on online diaries. According to Kawaura and other prominent scholars in this field, online diaries in Japanese began to appear on the Web in 1995 at the latest. A website containing a collection of links to online diaries, "Tsuda *Nikki* (diary) links," named after the creator of the site, was made in May 1995. On another collection site, Japanese Open Yellowpage (<http://joyjoy.com>), approximately 17,000 homepages were registered as of October 1997.

Compared with cyberspace in English (mostly attributable to the United States), the emergence of online diaries in cyberspace in Japanese was no later nor less extensive than that of those in English. Many researchers on online diaries in English agree that they began to appear on the Web in or around 1995 (e.g., Karlsson 2006). At this time, the Internet and the Web began to prevail in society at large and the number of Internet users had begun to grow.

However, online diarists were still rare among Internet users, still less among the population at large. It required a certain amount of knowledge of HTML and technical skills of web servers to set up and develop a personal homepage in the late 1990s, even though homepage hosting services became available widely. It was weblogs or blogs that finally make online diaries widespread and an active research object in the 2000s. Blog hosting services enable authors to post text, images, and links to various web pages, including other blogs, easily on their blog entries, which are posted with the date stamped in reverse chronological order, and readers to leave comments in an interactive format. Such features facilitate a much larger, less technically literate population to produce online diaries easily.

The growth of the blogosphere in the middle of the 2000s was tremendous. What is most significant here is that the expansion has owed as much to Japanese as to English. According to Technorati, in terms of blog posts by language, Japanese numbered at the top spot, with 37% of the total posts as of the fourth quarter of 2006. English occupied the second with 36%, followed by Chinese at 8% and Italian at 3% (Sifry 2007). Thus, Japanese and English dominate the blogosphere; given the number of speakers of different languages worldwide, this share of Japanese in the blogosphere is outstanding.

However, a significant difference is found when it comes to anonymity. The blogger callback survey of the Pew Internet & American Life Project reported that 55% of the bloggers surveyed said they blogged under a pseudonym or made-up name, while 43% said they blogged using their real name (Lenhart and Fox 2006). On the contrary, according to the web survey conducted by Ministry of Internal Affairs and Communications, Japanese government, 31% of the bloggers surveyed said they blogged under anonymity, 59% under a pseudonym or screen name, and 6% under a pseudonym or screen name suggestive of their real name, while those bloggers using their real name was only 2% (MIC 2009). In CEP, the strong self-effacement of the Japanese in blogging is again obvious. Five out of 24 participants possessed their own blogs and no one put their real name, portrait or e-mail address.

The same applies to the use of social networking sites. In fact, for most Japanese internet users, the distinction between social networking sites and blogs as a social communication media has been blurred. One need make registration to get full access to social networking sites and one usually has

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privacy controls that allow the member to choose who can view the member’s profile or contact the member. Blogs need no registration and have no privacy controls. However, for most Japanese, the main function of social network sites and blogs to write and to read is diary. As mentioned before, 31 out of 45 participants in CEP get access to a social networking site and all keep their diary. Furthermore, what they did in getting access to social networking site was almost nothing but writing diary and reading diary of friends.

In addition, people on social networking sites are as much self-effacing as bloggers. Only two of 31 participants use their real name and none put their portrait. As to blogs, some Japanese write filter blogs with their real names or nicknames and artists, entertainers, politicians and others write blogs for publicity. However, most ordinary Japanese bloggers keep diary without disclosing their identity. Five participants who possessed their blogs were no exception.

Based on the national social survey on the Japanese in January 2010, 13% of PC-based Internet users and 16% of mobile internet users get access to social networking sites more than once a month and 32% of PC-based Internet users 19% of mobile internet users read blogs more than once a month. What communications, then, are the Japanese who have homepages or blogs or access social networking sites engaged in? Such individuals are more active in communication activities on the Internet, and keep diaries on the web, even though they provide little information about themselves.

“KUUKI WO YOMU,” AND THE STRUCTURE OF THE COMMUNICATIVE ECOLOGY IN JAPANESE SOCIETY

As was mentioned, the CEP aims to explore complexity of communicative ecology among the Japanese, while searching for representations or tools of thought powerful enough to contribute to developing the communicative ecology. Over the course of the CEP, a term has been mentioned frequently by most participants to explain their feeling and emotions while making social communications: that is, “*kuuki wo yomu*” (to read the atmosphere).

The word “*kuuki*” literally means “air” and metaphorically refers to the “atmosphere or mood in a certain situation”. The word “*yomu*” literally means “to read.” “*Kuuki wo yomu*” thus means reading the mood or understanding what is going on in a given situation, and then knowing what to say and how to behave in the situation. Most participants express feeling obliged to “*kuuki wo yomu*” in social communications. In other words, they fear being labeled as “*kuuki wo yome-nai*” (cannot read the air; clueless) and ruining the atmosphere.

For example, when asked why they did not engage in voice communication with friends, the participants referred to a strong apprehension that they did not know the other’s surrounding circumstances when calling and would therefore run the risk of being called “KY,” an initialism for “*kuuki wo yome-nai*.” Some even showed their concern about being called KY when sending a text message via the mobile phone to friends. They felt that a text message via the mobile phone obliged its recipient to answer the message as soon as possible. Thus, they did not want their friends to reply to a message which might not be interesting to the friends. Actually, they talked about some occasions where they received a text message from their friends which was irrelevant to them and they felt at a

loss as to how to reply.

As such examples suggest, “*kuuki wo yomu*” or avoidance of “KY” functions as one of the most powerful cultural representations in social communications in Japan. Japanese constantly feel pressure to attune to the predominating “*kuuki*.” In order to engage in social communications in a proper manner, they try to detect what *kuuki* they are in and then what to say and how to behave in the *kuuki*. In other words, they require some preexisting *kuuki* in order to make conversation and act socially. Of course, *kuuki* is never a given fact; it is a subtle intersubjective atmosphere generated, constructed, and constantly changing through the incessant negotiation of people involved. A junior high school student wrote “It’s really difficult to decide whether to accept a situation so that you don’t disrupt the calm, or to stick to what you think is right even if you are called ‘KY’” in a short essay on Yomiuri Newspaper, December 8, 2007.

Given the constant pressure of *kuuki wo yomu* in offline face-to-face conversation, online communications are far much harder for the Japanese. Cyberspace is never a unified space with a single *kuuki*. It is diversified and divided into an infinite number of sub-spaces, each of which emerges, transforms, and disappears without any fixed boundaries or members. And yet, the Japanese still need a preexisting *kuuki* to engage in social communications in a proper manner. Thus, it is no wonder that they are reluctant to get involved in online communications, resulting in a strong preference for anonymity and little self-disclosure among those who do get engaged.

As discussed, the Japanese tend to avoid synchronous communication, e.g., voice communications either over the phone or on the Internet. Synchronous online communications tend to lack a variety of cues and be extremely difficult to generate or detect the *kuuki*. In addition, synchronous communications require one to initiate contact while they rarely know the receiver’s surrounding circumstances at the moment. Thus, synchronous communications may be intrusive to the other. If the one calls the other when the other is busy or does not welcome calling, the one would be regarded as “KY.” It is understandable then that voice communications tend to be limited to family, partners, and very close friends, with whom participants have already developed and shared some *kuuki*.

What is interesting in this respect is the popularity of “quasi-synchronous wave” service I would like to call. That is “Nico Nico Douga.”⁸ Nico Nico Douga is a video sharing service where users upload, view and share video clips like YouTube. However, one distinctive feature of Nico Nico Douga is that comments are overlaid directly onto the video, and synchronized to a specific playback time as Figure 1. Comments from different users are put on a single video and encoded with the time information. Thus, when one watches the video alone, they can feel a sense of sharing the video simultaneously.

In Japan, Nico Nico Douga is as popular as YouTube. As of March 31, 2010, it has over 16,700,000 registered users; over two million unique users access the site and watch an average of 37 minutes per day. It is no wonder that Nico Nico Douga has caught on in Japan. The kinds of

⁸ <http://www.nicovideo.jp/>

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comments welcomed are already established; that is, *kuniki* is already there. Users can add comments with little risk of being called KY and they can experience a lively wave of comments as if they are sharing the video with others simultaneously. Such a “quasi-synchronous wave” is likely preferred among Japanese, especially the young Japanese, who constantly feel pressure to attune to the predominating “*kuniki*”, yet have a desire to engage in social communications.

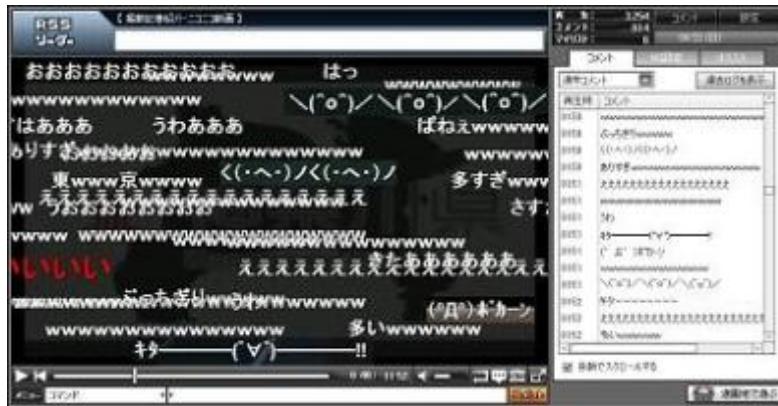


FIGURE 1 Nico Nico Douga (a sample image made by the author based on the Nico Nico Douga video interface).

Now, it is understandable that text messaging has become the default means of communicating with friends in Japan. Even with friends, the socio-psychological distance associated with voice communications feels too close for comfort; thus, many young Japanese will first send a text message to ask friends for permission before making a phone call. Without previous confirmation by means of text message, one runs the risk of being called “KY.” Furthermore, sending a text message obliges its recipient to answer the message in some way or other. It is generally assumed that messages sent via the mobile phone will be seen by the receiver instantly or much faster than those sent via the PC-based Internet, which elevates the feeling of obligation to respond. Some participants of my research conveyed such feelings. In fact, even text messages are limited to friends; people expressed reluctance to send text messages to just acquaintances.

Given that text messaging via the mobile phone is the default means of interpersonal communication with even close friends, and that e-mails via the PC-based Internet are largely used for business and school work, how do such individuals carry out interpersonal communication with more distant friends or acquaintances?

It is the web diary, blogs and diary on social networking sites that play this role. That is, online diaries work as “detour” or peripatetic communication means with acquaintances. Japanese bloggers and users of social networking sites record their daily happenings, everyday affairs, feelings, and emotions in their life and workday. Since there is little self-disclosure, what they put on their site makes sense only to those who already know the individual and the web address of the person’s blog or

nickname on a social networking site in particular: their family, friends, and offline acquaintances. Such people will access their blogs or social networking sites occasionally so that, when they meet, they have shared things to talk about. There is little risk in being called “KY” when it comes to such detour communication. Therefore, one of the main functions with which web diaries provide Japanese is the means to maintain interpersonal relationships with psychologically more distant friends and acquaintances with whom the use of mobile text messages feels a bit too close and may border on “KY.”

Of course, a number of Japanese internet users would like to get to know more people and engage in social communications with others in addition to offline acquaintances. On the other hand, they do not wish to disclose their personal information or offline identities. Thus, they upload information related to hobbies, interests, and entertainment in order to attract readers. Even though the creators and readers of these blogs or social networking sites seldom become acquainted online, let alone coming to meet and know one another offline, they expect other bloggers or other members of social networking sites who are interested in the same kind of information to visit their pages, thus leading to reciprocal visits, links and commentaries. They also hope that others will access to their pages via search engines with specific keywords. In fact, Japanese bloggers also use a variety of value-added functions to form some type of connection with others online and to monitor access to their blogs and a considerable number of them try measures to improve the visibility and traffic to their blog.

Thus, a subtle distinction as to categories for readers of blogs can be made between “particular Internet users of the same interest and hobbies” and “unspecified Internet users of the same interests and hobbies” in Japan. In fact, the MIC’s survey made such a distinction, whereas the Pew’s survey only distinguishes between “those whom they personally know” and “those whom they have never met” as types of blog audiences.

As discussed in this section, *kuuki wo yomu* or avoidance of KY, and its difficulty in online communications has the explanatory power to account for the characteristics of Internet use among the Japanese for which I have argued in this article: avoidance of synchronous communications, preference of anonymity, heavy use of mobile text messaging, and the widespread existence of blogs and online diaries.

The mobile phone, weblog, and the PC-based Internet as social communications media cannot exist independently; they are embedded in a communicative ecology. It is *kuuki wo yomu* or avoidance of KY, and the difficulty in conducting *kuuki wo yomu* in online communications that plays the fundamental role in developing the communicative ecology of Japanese society, whose structure is conceptualized in the Figure 2 below.

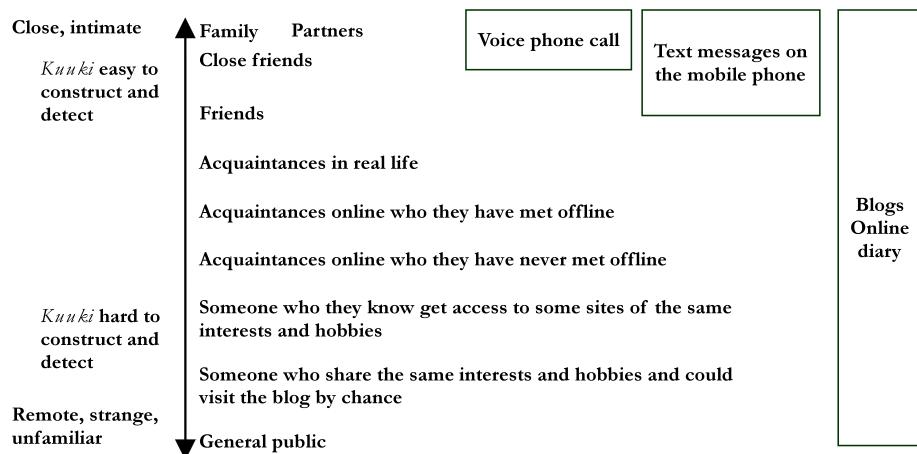


FIGURE 2 Structure of the communicative ecology of online communications media in Japanese society

The degree of ease for *kuuki wo yomu* in social communications varies according to the socio-psychological distance of the social relationship among the participants engaged in communication: the closer the relation, the easier it is to detect and construct *kuuki*. In addition, the different types of communications media have their own allowance for *kuuki wo yomu*. While synchronous voice communications requires high degree of *kuuki* shared among the participants, online communications of keeping and accessing online diaries and blogs can be made successfully with either low degree or high degree of *kuuki* shared. Therefore, the overall communicative ecology in Japanese society has been constituted through the dynamic interaction between types of communications media, social relationships involved and the degree of ease for *kuuki wo yomu*.

This article demonstrates, I hope, that it is essential to make our way deep into an intricate communicative ecology and emergent feeling, emotion and thought in getting access to the network in order to elaborate our understanding of dynamics of social communications. It is ethnography that provides us with the opportunity to explore a communicative ecology and to find out emergent objects of cyberspace, people's perceptions and conducts relevant to study.

And yet, there are significant challenges to develop the communicative ecological approach further. Among others, we need a close collaboration among researchers in academia and industry. The research need to cross different societies and to be conducted in a short period of time. The arguments of this article result from almost a decade of research of CEP and JFK study. Of course, JFK study is based on collaborative efforts of researchers in different societies and several researchers of both academics and industry have given substantive contributions to development of CEP. However, given incessant innovations and changes in ICTs, we need much intensive cooperation in a much shorter period of time. In this respect, the Japanese society must foster *kuuki* for collaboration between academics and industry in social science and humanities. We need to train researchers who are capable

of conducting ethnographic research focused on society and technology studies since the number of such researchers is still limited in Japan.

NOTES

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Creating Meaning in an Open Source Community

CHARLINE POIRIER

Canonical

Practicing ethnography, usability and user research in an open-source community is an interesting challenge because of the unusual development environment and the community's culture of freedom . My role at Canonical, which is the parent company of the Ubuntu Project, is to convey information about users in order to create software that is easy to use and enjoyable. In this article, I describe the challenges of communicating qualitative information about users to this highly technical community. As a case study, I discuss a project where I documented developers' interpretation of and work on a traditional usability report. This research has highlighted some of the challenges that ethnographers face in the industry and some of the deep disconnects between the work cultures and tools the respective professionals -- developers and ethnographers -- need to use.

MY RESEARCH

Canonical is the parent company of the Ubuntu Project, an open-source operating system which is intended to take its place beside Windows and Apple OS. This system is being created by a community of open-source developers.

I am part of the design team at Canonical – a team which was formed less than 2 years ago. The team is responsible for supporting the Ubuntu developers with design and research. An important part of my everyday work is to communicate actionable feedback on applications and to focus developers on the use rather than the creation of technology.

In order to understand how findings can be integrated into the development work, I conducted a short ethnography of how a traditional usability report would be responded to and transformed by a group of developers. My aim was to understand the developers' processes of working with usability findings in order to make the findings acceptable and actionable. My sense at the outset was that the particular characteristics of this 'client' group made the traditional usability report quite problematic, and in particular that there was likely to be a significant challenge to get the developers to engage with usability findings. And in fact, what I have learned is that the ethnographer, in this context, needs to do ethnography not only for the initial target – the potential and current users of Ubuntu – but on what would have traditionally been styled the client – the Ubuntu developers.

Initially, I conducted a round of usability testing of a software product called Empathy, produced by Collabora which itself depends on contributions by community members. I chose to work with a group of developers sympathetic to usability and who were motivated to improve their product and were ready to support my experiment.

After the testing, I made a formal presentation of findings and observed how the developers responded to the information I conveyed.

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Finally, I presented the process, the findings and the report itself to a group of developers in the Ubuntu community who were members of a usability mailing list. The aim was to brainstorm ways of improving the report. The observations and discussions during that session highlighted some important disconnects and some significant challenges. After the session, it was quite clear to me that the report would need substantially more than a cosmetic change, and, indeed, that it would need ethnographic input to render it deliverable.

Findings of the usability report

A close analysis of the usability findings showed that many of the issues encountered by the participants derived from misalignments between the participants' mental models of the application and the structure of the application itself. These differences caused problems that ranged from critical (e.g., not being able to register for the Empathy service) to merely annoying (e.g., having to search around to find the history of a communication).

The usability findings were gathered in a widely used¹ Openpresentation document in the format recommended by usability.gov², and contained:

- a description of the problem – what exactly the issue was that was experienced by participants, sometimes with a user quote
- an illustration of the critical area - screenshot
- a recommendation providing an appropriate solution
- a ranking of the severity of the problem: from 'critical,' meaning that the usability issue will prevent users from successfully completing a task or even from using the application; to 'medium', referring to a problem that will compromise a good user experience either by making it difficult to complete a task or by enforcing a process that is not aligned with users' mental models and set of expectations; and 'low', indicating issues that are more annoying than anything else (e.g., wishes for additional features that would improve use or even reporting plain bugs).

Developers' interpretation of findings After I presented the report to the developers, they immediately began to work: that is, they filed bug reports – reports which ensure that problems will be recorded and presented to the community as problems to be fixed. Here is an example of a usability finding, and its ‘translation’ by developers into a bug report:

[Usability report] Many participants did not see the star on the status box and, after noticing it, did not understand that it stores the message in the saved presets.

[Bug report] Empathy now uses a star icon for statuses. While this is good, the icon itself is dull and hard to spot. Firefox uses a similar icon, but it has more vivid colors and a higher contrast. It also looks better next to other tango icons. Should use that instead.

1. Openpresentation is an open-source presentation software.

²http://www.usability.gov/methods/test_refine/learnusa/testreport.html#ReportingImportantResults

The differences between these versions may be subtle, but they are consequential.

The expressed goals between usability and bug reports differ. The usability goal, as specified in the report, is to understand that presets can be saved, and where in the interface this can be done. The usability problem stems from the fact that the actual icon is not visible and its meaning is not explicit enough. The bug report, on the other hand, removes users from the equation and focuses only on the technology side of the interaction. In so doing, it simply states a new goal for developers: create an icon as serviceable as Firefox’s. This solution, once taken out of the context of use, cannot address the full user experience but only one of the goals which pertains to icon visibility. It does not help users understand the affordance of the functionality in this context.

This example highlights a crucial fact about bug reports as understood by developers: these reports represent a unique technological perspective that implicitly (or not so implicitly) looks for solutions to problems from the *machine behaviour*, and not necessarily from the point of view of an *interaction* between user and machine. This is because, for the developer, the bug report is fundamentally a *unit of work*. As a result, the system of bug reports isolates particular issues as technology glitches, and cannot account for systemic problems that would group several bugs together. This is, of course, in sharp contrast to the ethnographic perspective, where users have interwoven goals and emotions, are engaged in a flow and, often, as in the case of Empathy, their actions carry many goals and sub-goals when they face particular problems with the product. In short, for developers, bugs in bug reports exist independently of each other, while bugs for ethnographers are crucially parts of, and need to be addressed as parts of, larger systems.

Disagreements Between Professions During the various discussions we had about the usability report, a number of other disconnects emerged between the usability findings (as intended by the report writer) and the understanding of the developers. Most salient:

1. *How critical is the issue?* There was substantial disagreement between the usability specialist and the developers, as to the criticality of an issue.

For example, many test participants experienced serious difficulties while registering their accounts. Various steps of the registration process were not made explicit in the interface and resulted in participants failing registration.

For a usability specialist, this is a critical issue because it severely compromises the utilization, indeed, the very adoption, of the application. From the perspective of the developers, on the other hand, the issue is not critical. It was explained to me that a bug is critical, or severe, only if it prevents the application to run. Not being able to register doesn’t compromise the running itself of the application, and so is not “severe”.

More generally, it was interesting to observe how usability bugs were selected and prioritized by developers. The bugs to be immediately worked on were chosen on the basis of the facility with which they could be fixed and not on the issue they would solve for users, nor the level of criticality for use.

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In fact, shortly after the presentation of the report, of the 39 usability issues that came up during testing and that were included in the usability report, 9 bug reports were filed, and only 3 were actually fixed (1 critical, 1 medium and 1 low priority). Altogether the developers addressed 2 critical issues, 2 medium ones, and 3 low ones, in addition to one that was clearly a minor bug and one that was a ‘nice to have’. In contrast, the usability practitioners would have argued that priority should have been given to critical issues that compromised the use and more importantly the adoption of Empathy.

2. What type of issue is it? Issues contained in the usability report, from the developers' perspective, belonged to varying categories of errors: some were design-related, others were feature wishes, and yet others quite simply reflected user mistakes. From their perspective, these required different interventions by different professionals. During the report presentation, developers would say “this is a design issue, you need someone to change the specs,” or “this is a feature wish,” meaning that it would not fit in a bug report. For the usability specialist, of course, these were all straightforward usability problems that affected users in the same way – they prevented them from achieving their goals.

The usability report is in itself a multi-audience document. By its nature it transcends organizational boundaries by unifying an application under one dimension which is the user experience. In the open-source context, however, and as I describe more fully below, developers work in relative isolation from other parts of the organization and particularly from design and strategy. As a result, even the most critical usability issues that come across the desk of the triager (the person who is responsible to triage and assign bugs) can easily be rejected as a bug, and because bugs are in effect the way work gets organized in open-source, usability problems expressed as bug reports that are not ‘proper bugs’ can effectively become lost or ignored.

3. What is the problem? The developers, and hence Empathy itself, did not share the mental models of their intended users and consequently did not match their expectations. The application had historically been conceived as a mail client and had evolved on the metaphor of mail interaction. From the user's perspective, however, Empathy is a social networking aggregator that allows them to consolidate all their social networking accounts under one roof; accordingly, participants thought that they should be able to treat Empathy as a unique social network.

The underlying organization of Empathy and participants' expectations often conflicted as participants spontaneously interacted with Empathy, thinking they were dealing with a standard social networking site. For example, participants expected to find all information about their contacts grouped naturally around the contact's name. That was not the case though. Empathy stored information about contacts under various menus that categorized interactions into types (making distinctions, for example, between receiving a document and receiving a message). Empathy also segmented many user preferences on the basis of accounts. In Empathy, a user could modify information in only one account at the time – for example, changing an alias would need to be done on each email account separately and could not be applied automatically to all accounts as participants expected. The result was that users, who expected to have changed their alias, had failed to do so, and didn't even know it.

Another example of conflicting expectations: when one of a participant’s contacts sent a file to the participant, a notification would alert the participant to the fact that the contact had sent a file. Following the notification, the participant would spontaneously look under the contact’s name in the contact list to find the new document. In actuality, however, the document didn’t show up there, and was hidden.

Because user experience is fundamentally systemic, these types of mismatch between mental model and Empathy’s underlying metaphor had at least two viable alternative solutions from the user experience point of view: (1) the implicit metaphor of Empathy could be made explicit by means of warnings, feedback messages, and contextualization - users could be provided with more guidance to intuit Empathy’s metaphor; or (2) Empathy could be underpinned by another conceptual model, the one expected by participants – the model of social networking – and, under this alternative model instead of being menu driven, it would be interaction driven, that is, everything regarding a person would be connected to this person. To follow users’ expectations, developers would need to reorganize the information architecture and the interaction model accordingly and because of the work structure based around bugs, developers are not in a position to carry such complex and fundamental work.

In sum then, the usability results tended to be transformed by the developers, and the tools they used to understand and plan their work proved to be at odds with the nature of usability and of user experience. When we consider their working context, as I do just below, we can begin to gain insight into why this was so, and can see, at the same time, how the communication gap between developers and user researchers might be bridged.

THE OPEN SOURCE CULTURE

The Community

The open-source community is a context that is, in certain ways, fundamentally different from other commercial enterprises where ethnographers work. The community consists of independent developers scattered worldwide, often working from home, who, for the most part, donate their time and energy to open-source projects. Decisions about the software they are developing are often made through informal interactions on chat channels. While there are no doubt a variety of reasons for individual developers to want to participate in these projects, it is certainly true that for many, their participation comes from their passion for technology coupled with a belief in the open-source philosophy of sharing and making technology available and free – that is, available to all without charge, and also with the option to *modify any software*. “The belief in the freedom to access, study, modify, redistribute and share the evolving results from a FOSS [Free Open Source Software] [is at the core of every] development project.”³ Fundamentally, in open-source:

- work is self-directed and loosely organized around the evolution and maintenance of code;
- developers’ motivation for working on various applications and on the desktop are personal -

³ Scacchi, W. 2007, 260.

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- they elect to work on what is of interest to them and scratch the proverbial “itch”;
- the work fundamentally does *not* constitute a commercial venture since the final product is free and consequently doesn’t have the same pressures of profit making and market competition as other products are facing;
- applications are often created outside of any organizational structure, typically by independent teams whose members negotiate with each other the vision of the software being developed. This means that there is no one, *per se*, who has full authority over the projects and who can dictate work. In particular, rarely are there managers who have the power to enforce strategic decisions from top down and who can prevail upon developers to make specific modifications. In fact, even in cases where managers have been appointed, they have tended to find themselves in a position where they have to negotiate with developers application features and designs often based on developers’ ability, interest and available time. (In this alone, the open-source world differs from the typical commercial institution where workers can be instructed to follow management directives);
- community members’ intrinsic rewards for working on a volunteer basis include: (1) the sheer intellectual pleasure they experience from working on issues that are of interest to them, and (2) having their skills and ingenuity recognized and celebrated by their peers.⁴ The high skills of community members, and their expectation of the same in their peers, make the community itself rather elitist;
- developers are widely dispersed geographically. Almost all conversations are public – developers work in “the open”, and suggestions and ideas are communicated on IRC (Internet Relay Chat), forums, blogs or mailing lists. These conversations often revolve around codes and bugs;
- because the community is virtual and members meet over chat and communication channels, the acceptance of any comment, proposed change, or opinion defines the community by symbolizing inclusion of the contributor into the community as a member. Because each contribution has such power, members of the community are intolerant of opinions that do not reproduce community values, uniqueness and modus operandi;
- applications in the process of development tend to be released early, before they would traditionally have been considered to be completed, because there is an expectation of sharing and a concomitant expectation that the community will be involved in reporting bugs and truly finalizing together the product.

It is easy to see from this picture, I hope, that there are substantial cultural challenges to presenting qualitative insights such as those provided by practising ethnography and usability in this community. The open-source community is one of relative equals where, typically, no one is in a real position of authority. Instead, authority tends to be replaced by prestige, and prestige is obtained through the demonstration of skills and technical knowledge – thus keeping the discourse focused on machine behavior. In the open-source community, participation stands in itself as an acquisition of legitimate membership in the community, the barriers to entry being quite substantial. Finally, the lack of commercial success as a motivator and an organizer means that developers have personal reasons to engage with the products they are working on – Ubuntu, for example – and the pursuit of their goals

⁴ Scacchi, W. 2007

might not always match the overall goal, e.g., of having Ubuntu be a widely adopted operating system by a wide range of users. It is therefore a real challenge for the ethnographer or the usability specialist to effectively inject their findings into the community’s workflow – a challenge not faced, or at least not nearly to the same degree, by the ethnographer working with technical people in other commercial corporate settings.

CHALLENGES FOR THE ETHNOGRAPHER

As I have argued, usability findings are difficult to communicate to the Ubuntu developer community precisely because of its combination of (1) a total focus on technology and code; (2) its culture of freedom and lack of hierarchy or management, (3) the highly dispersed nature of the workforce, communicating and organizing work on IRC, (4) the voluntariness of the work, and (5) the fact of frequent releases, usually before the products are bug-free.

What my research indicates is that to be successful at communicating usability findings to Ubuntu developers, we are going to have to rethink the nature of a usability report and moreover, the role that the usability specialist plays. Evangelizing on ethnographic themes is not likely to be directly effective in this work culture because the tools are at odds with the knowledge. The challenge to the ethnographer, then, is how to present a usability report to developers, in a format and style that feels right to them so that the conclusions actually penetrate their workflow and ways of interacting, and that (1) keeps at the forefront the importance of user goals and interactions, and (2) allows developers to appreciate the holistic nature of the report’s information.

Of course, one alternative here would be for the user researcher to take on some of the tasks of the developers, such as opening bug reports while keeping the user focus and context as much as possible. This would be difficult to maintain though, and in any case would not advance the ethnographer’s cause of working on complex and systemic bugs with particular urgency. Another approach could be to use chat rooms to discuss findings and to get developers publicly to agree on the systemic issues and from there, generate appropriate solutions. However, chat channels are quite limited and are not designed to support elaborate complex discussions. In a word, trying to take direct advantage of developers’ tools and customs – tools and customs that are effective for the type of work developers do and the type of communications they engage in – might not be well suited to the nature and goals of ethnographic and usability work. Proceeding this way might threaten the effectiveness of the ethnographic practitioner by impairing the full transmission of findings, especially in cases where the practitioner does not master these tools and cannot show the technical expertise that is required to be accepted as a community member.

Martin Albisetti faced a similar situation to the one I have described here, but in the area of design. He has described how he created a work process and put in place a group of community

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members responsible for design review⁵. The difference between this effort and our situation is that developers with whom Albisetti worked felt they needed design input to their applications, whereas usability input, in the Ubuntu context, is more controversial. Still, we have taken a similar, if tentative approach, by beginning a program we have called the ‘user experience advocate’, precisely with the goal of overcoming the communications challenges I have described by injecting a user’s voice into the project.

The user experience advocate is a community person with technical knowledge who is interested in user experience and working on development projects. S/he will be formally assigned to relevant teams and will be responsible for defending the interests of potential users. Belonging to the teams, this person will share the teams’ goals, and will deeply understand the inner workings of the project. At the same time, s/he will work closely with the ethnographer or usability specialist to insure that the project team has all the information needed to build a strong user experience. Their responsibilities include:

- reviewing use cases and task flows if they are available or producing them if they don't exist
- reviewing usability and user research documents
- communicating user experience research to the project team
- reviewing software against user experience guidelines, usability heuristics and brand
- communicating to the design and research teams user experience issues and defusing any disagreements that could compromise the user experience
- advising on solutions that are most aligned with users needs
- requesting or conducting usability testing, as appropriate, to support the project team decision making
- cross-reviewing user experience of other projects and participating in discussions across projects
- writing and following bug reports throughout the life cycle of the project

This role is still at an experimental stage. With time we will evaluate and refine it.

Another approach is more holistic and involves tapping into the symbolic life of the community and using it to forward the cause of end users. The ethnographer, of course, can appreciate the great potential working with a community offers. Indeed, Ubuntu is a community, in the true sense of the word, and the richness of its symbolic life is deep. There are, no doubt, opportunities to tap into this symbolic life. Let me explain with an example.

One important tool we use in design is “personas”. Personas represent more or less different ‘types’ of users. The tool is effective to help designers and developers alike to obtain a description of important differences between potential users of their products. One persona might use Ubuntu to support their work, whereas another might use Ubuntu for entertainment. These differences in user

⁵ Albisetti, 2010

goals and usages impact in fundamental ways the strategy and structure of a product. At Canonical, we have created such personas for the desktop.

At present, we communicate the characteristics of these personas in a quite formal way, through posters, containing a picture, a quote, a narrative, a statement of life goals and experience goals, a section on needs and a list of specific implications for design and development. My concern, though, is that the posters do not have optimal take-up by developers, and our challenge is how better to convey the personas to them.

We are not working from a blank slate, however. In the community, there has been a version of a persona that has been around for some time, though it is being only casually used by developers. This persona is the famous Aunt Tillie⁶, the archetypal non-technical user, an elderly and scatterbrained aunt. Although there is no ‘technical’ description of her – other than a couple of lines in the Cathedral and the Bazaar (Raymond, 2001) – Aunt Tillie has captured the imagination of the community and has become, as we might say, part of its folklore. What we need to do, as ethnographers, is to understand more deeply how this take-up has occurred, and to apply what we have learned to the personas we have developed.

CONCLUSION

In this paper I have described a range of challenges faced by ethnographers and user researchers relating to translating qualitative findings into actionable work items and appropriate focus for our community of open source developers, and I have identified opportunities based on the rich community life and on how the culture absorbs new concepts.

Of course, it is imperative that the community of ethnographers ensures against compromising on the quality and integrity of their results as they try to serve organizations. At the same time, what my work illustrates is that there are substantial constraints on the practice of ethnography and usability, particularly in this highly idiosyncratic – but rapidly spreading and increasingly important – context. It highlights also the fragility of our skills and contributions when we are confronted with other ways of working, into which we are trying to fit our results.

I am fortunate to work in the open-source community where initiative, experimentation and collaboration are the rules. I hope and expect to leverage this initiative and experimentation, by suitably elaborating my communication approach, to mainstream ethnographic results into the open source development process.

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⁶ Raymond mentioned Aunt Tillie as an example of the non-technical user in many of his writings.

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Navigating Value and Vulnerability with Multiple Stakeholders: Systems thinking, design action and the ways of ethnography.

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A growing cadre of organizations, corporations, NGOs and philanthropic foundations seek to address difficult global problems like poverty using social innovation and technology. Such problems are multivalent, deep-rooted, ever changing and culturally specific. Amid this complicated terrain, ethnographic tools and methods are uniquely suited and key to successfully addressing these large-scale dilemmas. In our project, we use dynamic combinations of research, strategy and creative thinking to develop scalable financial service prototypes designed to promote financial inclusion for the world's poorest individuals. Fostering holistic solutions in this arena requires new ways of conceiving, designing and delivering innovation. In this paper we describe our process and vision for navigating these complex environments with hybrid strategies and an embrace of systems thinking¹. We conclude with six imperatives for success in global social innovation projects.

INTRODUCTION: DEFINING THE TERRITORY (THE WAY OF SEEING)

In 2008, our team was awarded one of 17 initial grants from the newly-formed Institute for Money, Technology and Financial Inclusion (IMTFI) housed within the School of Social Sciences at the University of California, Irvine. IMTFI, funded by the Bill & Melinda Gates Foundation, aims to foster an “open-source” community of inquiry and practice on new forms of money and financial technology among the world’s poorest people. IMTFI’s director Dr. Bill Maurer envisions the institute to be more than just a collector, analyzer and generator of data, insights and business ideas. IMTFI aims to also create persistent connection among a global network of researchers, designers, field sites, local institutions and companies.² Findings reported by IMTFI and its researchers are available for free download by anyone. This open-source monetary-thinking hub represents a disruptive innovation in financial services research and design.

We are currently in the second year of our three-year project, researching and developing creative solutions to address global poverty and the need for financial inclusion, focusing on the sustainable

¹ Systems thinking as discussed here is inspired by the work of Harold G. Nelson. He refers to Systems Thinking as the process of understanding the relationships between constituent elements and the resulting qualities of an emergent whole as it interacts in any given situation with larger contexts and environments (Nelson).

² The mission of IMTFI is to support research on money and technology among the world’s poorest people: those who live on less than \$1 per day. “We seek to create a community of practice and inquiry into the everyday uses and meanings of money, as well as the technological infrastructures being developed as carriers of mainstream and alternative currencies worldwide.” <http://www.imtfi.uci.edu/>

trade industry and its stakeholders, particularly farmers and cooperatives. This paper explores the use of hybrid strategies to navigate the boundaries of a social innovation project with an embrace of systems thinking, and offers six imperatives for success.

SYSTEMS THINKING AND HYBRID STRATEGY

In the initial phase of our IMTFI project our goal was to gain understanding that could lead to financial management applications in the form of information communication technologies (ICT’s) and services for the poor³.

As a nascent field, social innovation is still defining its boundaries, with hundreds of methods and tools at play, ethnography among them. Many of these methods have developed through the creative blending and recombination of disparate elements and ideas.

The hybrid strategy we apply includes methods drawn from design, business and social science research. Our methods to date include: a participatory design session with 22 farmers in central Mexico; a work session at the Gates Foundation with international experts in telecommunications, agriculture, banking and behavioral economics; ethnographic field observations at a coffee farm in Zaragoza, Mexico; a town-hall meeting with day laborers from 97 farms in the region of Zaragoza; and in-depth analysis of current innovations in microfinance, mobile banking, local food movements, farming communication technologies and venture financing.

The ongoing process will include further observation, secondary research, co-design, concept validation and prototyping of our concepts for various stakeholders. These concepts, once validated by stakeholders, will be freely available through IMTFI⁴.

DEFINING “THE SYSTEM”

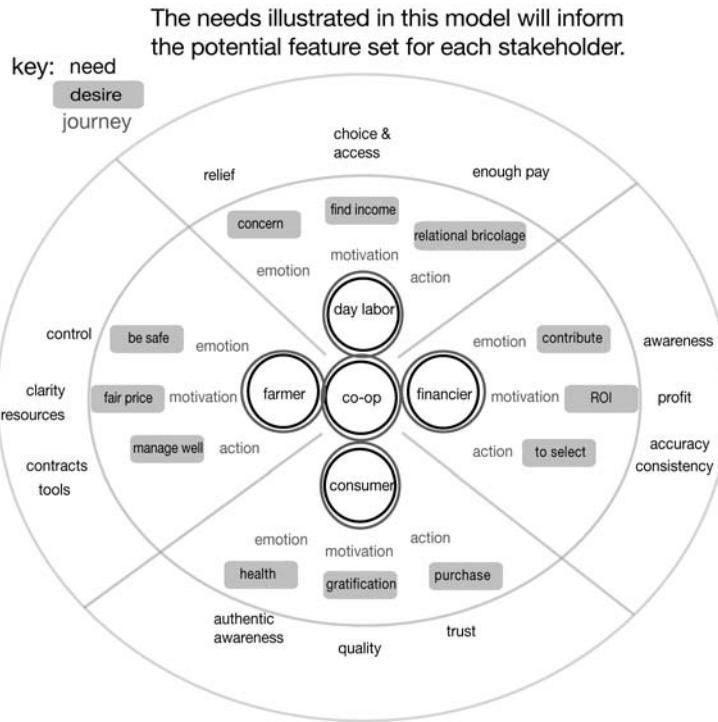
Systems thinking avoids solving for the needs of a single customer or “end user.” Instead, the “system” encompasses the many individuals and organizations forming an ecosystem, each with varying needs. Approaching social innovation projects like ours with systems thinking reveals a multitude of simultaneous drivers and reactions. We view these drivers and reactions as elements in relationship. Understanding relationships requires the ability to adopt alternate perspectives, observe potential and actual connections and the ability to interpret—reinforcing our desire to blend ethnographic and creative methods. Through understanding the complete landscape – frameworks, participants, industries and workflow – we begin to see what has been previously been overlooked and perhaps then discover what is truly possible.

³ In Phase One “the poor” was defined by us as those earning less than one dollar per day. The Gates Foundation’s Financial Services Group’s mission is to provide formal financial tools to the billions of people living in the world who live on less than \$2 per day.

⁴ 2010 IMTFI Design Principles http://www.imtfi.uci.edu/imtfi_firstannualreport_design_principles

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Behavioral Journey Model



Our insights indicate most systemic breakdowns occur because of indirect or non-existent communication and a lack of understanding.

As we develop ICT's how might we help stakeholders move from:

Abstraction to understanding

Indirect communication to true engagement

- aiding financial inclusion

FIGURE 1. Behavioral Journey Model)

How might we assist the poor so they may receive meaningful financial services? One would think of the banking industry as a natural place for innovation in financial services. To the contrary, global innovation, particularly social innovation, is stifled within banks. In part, this is due to the current climate of shifting regulations particularly with regard to global outcomes, since regulations are specific

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to most countries or regions. A scalable solution must be able to negotiate geographic and regulatory constraints.

Because of these limitations we chose a different industry with which we could build our research, think creatively and be strategic – the sustainable trade industry. Sustainable trade operates across every continent, touching many countries and affecting a chain of individuals from venture capitalists to day laborers, and everyone in between, including farmers and consumers. In practice, we believe that the sustainable trade industry will serve as the backbone for continuous innovation even after our project team moves on. While banks must be included in the solution, they will be a partner for a later phase, after the innovation has been welcomed, used, refined and rooted in the sustainable trade network.

We further noted that a key component of the sustainable trade industry are co-op coffee farms like the 21 de Septiembre Cooperativa. These co-ops are natural pillars in their community. They are culturally sensitive and deeply invested in the livelihood of not only their members, but the village as well, including day laborers (which in our case are unmarried women and the Mixteca indigenous peoples). The core values of the cooperative include shared accountability, shared planning for infrastructure and shared responsibility for the poorest individuals.

Can cooperative farms be a gateway for financial services that are culturally appropriate? We think so. Currently, it is common for microfinance solutions to earmark funds for individual women because the payback rates for female borrowers is higher, providing a better return on investment. However, we observed in Zaragoza funding women at the exclusion of male relatives disrupts the power structure of families. Disruptions to familial hierarchy may not affect the return on investment—but does affect the harmony of the community. Our insights led us to prototype ideas focusing on the cooperative rather than individuals, hoping to avoid this disruption in the cultural fabric of the family.

After defining the sustainable trade industry as our system, we defined key stakeholders within the system.

We are co-designing concepts with the following stakeholders:

- Sustainable financiers (the Finance Alliance for Sustainable Trade)
- Importers and retailers (Sustainable Harvest)
- Cooperative farmers (The 21 de Septiembre Coffee Cooperative)
- Farming day laborers (workers in the farming town of Zaragoza, Mexico)
- Consumers (coffee drinkers)

OBSTACLES AND OPPORTUNITIES ALONG “THE WAY”



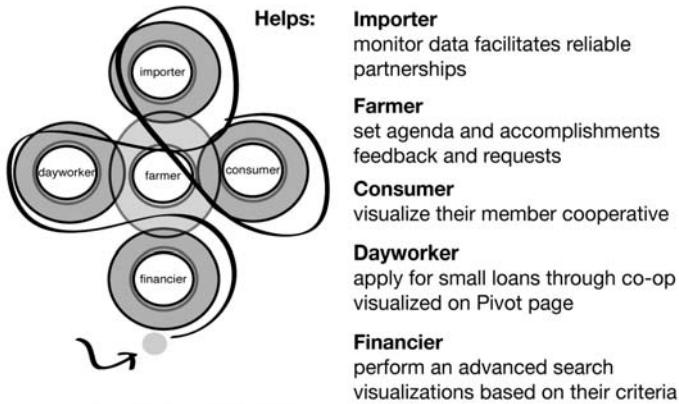
A truly holistic solution for financial inclusion should balance the needs of the stakeholders in the ecosystem. For example, one might assume that because one of our stakeholders, the Bill & Melinda Gates Foundation, has the mission to alleviate global poverty, and IMTFI’s goal is financial inclusion for the poor, we would prioritize solutions for the poorest individuals—and focus on these individuals as our sole “end user.” With a systems-thinking approach we have to weigh the impact of particular solutions for all stakeholders in a way that will work for the system as a whole. For example, here we see how one of our prototypes using MS Pivot will meet the needs of each stakeholder. Note that at this phase, concepts are intentionally broad, leaving details to be validated with stakeholder input.

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sample concepts: conversation starter for co-design sessions

CONCEPT | MICROSOFT PIVOT DATA VISUALIZATION SOFTWARE | DATA LINKING

Each concept has a service model, interface prototype (mobile and web) and monetization features to test in co-design sessions.



See information in a customized context

FIGURE 3. MS PIVOT™ Visualization Software

HYBRIDITY: USING RESEARCH, STRATEGY AND CREATIVITY INTERCHANGABLY

We developed our team to include people who feel at home applying a mixture of seemingly disparate methods—in this case, to solve intractable problems in new ways. We apply the rigor of

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social science, and at the same time, the creative intuitive and conceptual leap of art. Our team is thus able to draw upon many tools in a non-linear process.

The complexity of the project, along with significant time and budgetary restraints, means our team has had to tolerate a high degree of ambiguity, celebrate flexibility and shift roles as the project demands. In contrast to the limitations often inherent in projects undertaken for corporate clients, our leadership at IMTFI stresses “doing what is right for the project”.

If, for example, we had been working for a financial institution, we might have been constrained to develop innovations scoped by “financial management technology”—despite our reframe early on pointing to a more appropriate, alternate entry point for the discovery process, leading to our refined focus for one concept on innovations in “earning.”

In our research in Zaragoza, we discovered the limited cash funds received by cooperative farmers or day workers were spent in ways that had special relationships—“partnerships”—to the specific type of work that generated the funds. For example, “extra” money earned from small jobs like selling flowers (which was enjoyable) went to buying butter or cheese (enjoyable), while money coming back from the United States was seen as serious and painstaking, and went into building projects (cement or stone). Our observation is that these cash streams have “personalities”—emotional and habitual allocations based on where and how the money has been generated.

We realized that there is no “partner” cash stream dedicated to security or fending off the unforeseen—what we would commonly call “savings.” Putting a little cash aside here and there was common in the household, in addition to saving rice or cash for ritual celebrations—but the cooperative itself had no nest egg or emergency fund. The intangible, abstract, unthinkable future did not have a partnered cash stream. The obvious potential funding source for savings, money from coffee profits, had to be split fairly in a transparent fashion—immediately and to the penny. This was not surprising, considering that the farmers and day laborers (i.e. the cooperative members) have barely enough to make due each year with what they’ve stockpiled, material and financial, to guarantee their survival. No existing cash stream could be diverted to saving for the unforeseen, not coffee profits and not small job profits. There simply was not enough “extra” anywhere in the system to divert to savings, and if existing cash streams from small jobs were increased in order to go to savings, our observations indicate this would challenge the existing emotional “partnerships” between income and allocation. For instance an increase in flower sales would generate more income but that income would not naturally and emotionally flow to savings.

The treasurer of the cooperative, Pedro, shared his story of emigration to the US to find work. He traveled across a desert, nearly dying. He was lonely in a hostile and unkind environment, away from his community for years. Pedro was willing to exchange his life to build infrastructure in his community. Upon return to Zaragoza he spoke English and had financial acumen. Now he is the treasurer of the cooperative and considered a financial authority, based on his experience. Without risking his life and going through such trials, he said there would have been no way for him to build this life for his family or expand his options.

OBSTACLES AND OPPORTUNITIES ALONG “THE WAY”

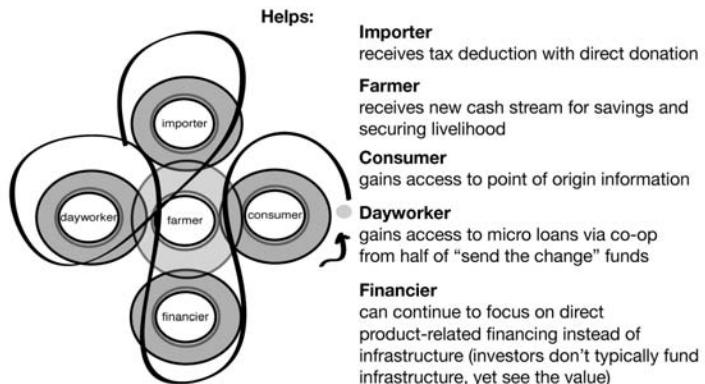
“Financial management” took on a whole new meaning in light of stories like Pedro’s.

Management is not simply moving money between accounts—but rather a complex human system, that takes into account life choices, emotion and sacrifice. We realized that finding a way to help the cooperative create emergency or contingent funds was crucial to successful, sustainable “financial management,” designing for livelihood. Such a solution would meet the needs and address the relationships of many of our system’s stakeholders. Therefore, for one concept we narrowed in on developing a prototype for an alternative, novel cash stream that could be earmarked for unforeseen circumstances, to have an emotionally dedicated savings stream.

sample concepts: conversation starter for co-design sessions

CONCEPT | SEND THE CHANGE | CONSUMER ROUNDS UP WHEN PURCHASING A POUND OF COFFEE

Each concept has a service model, interface prototype (mobile and web) and monetization features to test in co-design sessions



co-op receives
novel, dedicated
cash stream for
infrastructure,
savings and
microloans



photo courtesy Bill Mauer

FIGURE 3. Send the Change concept

OBSTACLES AND OPPORTUNITIES ALONG “THE WAY”

NEXT STEPS: STAKEHOLDER NEEDS IN HARMONY

IMTFI’s flexible program allowed us to reframe the entry point of our investigation. Stories like Pedro’s led us to put a new stake in the ground to design for livelihood and holistic outcomes—one important concept being the creation of new income streams.

In the final phases of this project we will prototype services and technologies to be shared in co-design sessions that take into consideration the cultural context of the cooperative. For example, inspired by the social norms of the community the cooperative will manage a new cash stream generated by consumers and investors via technology transfers. The ethnographic gaze will continue to enable us to uncover subtleties in behavior and emotion, and provide the cultural sensitivity and attentiveness to human interaction required for the success of each of these studies. Similarly to the cooperative, each other group of stakeholders in our system will participate in co-design sessions with outcomes intended to aid the flow, integrity and usability of the concepts. We envision our ICT-based adaptive system to be culturally mercurial.

In closing, we share six imperatives developed over the course of this project. These principles arose as helpful guides in our process, and may prove useful to other social innovators who want to take a systems- rather than user-centric approach to designing scalable, adaptable, sustainable solutions.

SIX IMPERATIVES FOR APPLYING SYSTEMS THINKING TO SOCIAL INNOVATION

1. Leverage existing structures and routes of communication and exchange (for our project – the sustainable trade industry)
2. Identify under-utilized relationships both overt and implied (for us the farmer and coffee-consuming customer are in an implied relationship, even though this connection today is abstract or obscure)
3. Align the team with powerful affiliations that allows for change (*Supportive leadership*, for us: Dr. Bill Maurer at IMTFI, Program Director at the Gates Foundation, Mohammed Mohammed, and Scott D. Mainwairing of PaPR Intel)
4. Consider all concepts in concert; resist the urge to favor one stakeholder’s outcome over another
5. Co-design with stakeholders at all levels to identify appropriate features for useful, useable and desirable outcomes
6. Be hybrid people: use business strategy, scientific research and creative thinking interchangeably

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Paper session 4: The way of the way

Rogerio dePaula, Curator

The Martial Ethnographic Arts

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There is longevity to the ethnographic arts: a report referred back to over years, an image that captures a resiliently fresh insight. In crude words, ethnographic analysis has a longer shelf life than traditional market research. The latter requires tending to keep its categories replete with a fresh cast of characters. The former is distinguished by a methodological practice that keeps it fresh and truthful without the necessity of being, for the moment, a truth. There is a mastery of the ethnographic arts. For twenty years, I have practiced as an academic ethnographer, private sector consultant and now corporate practitioner. I now hire ethnographers. (I have become an armchair anthropologist.) To do so, I must discern what makes some ethnographic practitioners better than others. I compare along three practices: documentary finesse, journeying and discipline (the latter more yogic than Foucaultian). I hire for the longevity and truthfulness of their work.

THE BEGINNING

There is a longevity to the ethnographic arts: a report referred back to over the years, a photo that captures a critical moment and still resiliently fresh truth, a chart of a common practice that renders it momentarily foreign and, as a result, suddenly intelligible. In cruder words, ethnographic analysis has a longer shelf life than, say, traditional market research. The latter requires tending, updating, refreshing to keep the demographic or other categories replete with a fresh cast of characters. The former is distinguished by a methodological discipline that keeps it fresh and truthful without the necessity of being, for only the moment, a truth.

There is a mastery of the ethnographic arts. For the last twenty years, I have practiced on all sides of the ethnographic practice – as a student and academic, as a consultant and now as a corporate practitioner. Now, given the recession, I hire ethnographers to unearth the social practices of the elderly in Turkey or daily lives of farmers in rural China. I have become, I confess, an armchair anthropologist. As a result, I have had the necessity of discerning what makes some ethnographic practice masterful and long lasting and some not. I divide this mastery into three practices: documentary finesse, journeying and discipline (the latter more yogic than Foucaultian).

Documentary finesse is a deceptively simple act of exchange. As ethnographers, we display trappings of our work (research goals, methods and documentary equipment) in exchange for a recordable moment of truthfulness. Not everyone can walk into a tiny Shanghai apartment with two video cameras and in the meager few hours allotted to us as corporate ethnographers make the occupants feel so at ease that they share intimate nuances of their lives. I have seen the flip side, a photo of a field researcher setting up her field recording equipment in front of stunned farming couple in rural

Sichuan. The pair could not see the researcher for her large digital still camera on tripod and glossy laptop. Her report returned only tales of grinding poverty.

Edward Ives in a classic on the ethnographic method insists that the folklorist place his or her recording equipment clearly on the table.¹ He understands the code of ethnographic conduct, that a practice so simple as openly displaying one's tape recorder can signal a genuine interest in the telling of an almost forgotten tale. Ives worked with a tape-recorder. We are now in the age of Facebook, QQ, Orkut and more – a world of endless self-conscious documentation. Our exchange is that of genuine interest for a genuine performance of self.

Then there is the journeying. Academic anthropologists have long documented the importance of the ethnographic journey. Yet as corporate ethnographers we truncate it and chop it into impossibly short and ideally inexpensive increments. We must squeeze as much experience and insight out of our limited time in the field as possible. I applaud the use of local experts for quick access and analytical entrée into the field. Their mastery comes with rendering the journey into an analytical one and navigating the discomforting intimacies of field and home. The downfall comes as the line between tour guide and incisive local expert blurs. The journey, for the ethnographer, is a ritualized path. Victor Turner talks about guides who lead through the thicket of symbols. I hire for those who can understand their freshness and vitality.

Here then lies the final call for a discipline of ethnographic practice. This discipline is more yogic than Foucaultian, a call for learning through repetition, re-hashing and re-telling. Over the last five years, I stopped hiring ethnographers for a report. I now hire for the ability to build grounds-up a symbolic and narrative fluency amongst my team and my key stakeholders. The raw field notes, the half-baked field reports and the weekly meetings where we debate the significance of an elderly woman's loss of eyesight and her memory of reading a favorite novel – these disciplinary practices extend the longevity of the ethnographic project. The tale of the elderly woman's failing eyesight did not make it into the final report, but our debate shaped how I told and now re-tell the story of the ethnographic project.

A DISCLAIMER

As an ethnographer and perfectionist, I hold my work to a high standard. By no means, however, do I claim mastery. I strive for it (hence the perfectionism) but have yet to achieve.

The inspiration for this paper came from the many excellent ethnographers I have had the good fortune to collaborate with over the last fifteen years. In the following pages, I largely refer to ethnographic work I have funded or conducted over the past five years. In my experience, these last five years mark a turning point in the corporate practice of ethnography. I offer these recent examples of documentary finesse, journeying and discipline to catalyze the larger conversation on what constitutes the mastery of the corporate practice of ethnography.

¹ Edward D. Ives, *The Tape-Recorded Interview: A Manual for Field Workers in Folklore and Oral History* (Knoxville: University of Tennessee Press, 1974).

DOCUMENTARY FINESSE

When Susan Faulkner and Alex Zafiroglu showed a video clip of a Shanghai woman pulling out her third mobile phone from yet another pocket of her impossibly tight jeans at an Intel conference, no one in the audience asked Faulkner and Zafiroglu about their research outcomes or insights.² Instead, we badgered them with questions of how they managed to both see and capture such compelling video footage. We had witnessed documentary finesse and we knew it.

It is not a fluke when we, as ethnographers, succinctly capture a moment in image, photo, video clip or tale. The freshness and vitality of Faulkner and Zafiroglu’s video clip, I argue, is evidence of their documentary finesse. It is also evidence of a well-prepared and well-conducted field engagement. Both knew what they were looking for, how best to document it and how to finesse the appropriate social environment in which the woman would remember the third mobile phone, pull it out of her tight back pocket and talk to a team of strangers in an impossibly small Shanghai apartment while Faulkner’s camera rolled. All of these, from the preparation to the finessing of the social environment to the tedious documentation comprise the art.

Edward Ives in a classic on the participant observation method insists the interviewer intimately know his documentary equipment, in his case the tape-recorder and in Faulkner’s case the video camera.³ This familiarity, he argues, is necessary so that the technology does not get in the way the interviewer’s real work, the interview. Nothing new here, documentary technology should be friend not foe.

Yet, Ives goes further to insist on a code of ethnographic conduct. For him, the interview is an intimate affair, closer in spirit to marriage or companionship (but definitely not therapy). It is also a mutual exchange: audience for narration, in his case. The clear research agenda and open display of documentary tools then signal an undivided interest in the person and what they have to offer.

Over the past few years, I have seen that what is exchanged during fieldwork (during observation or interview) goes beyond an audience and tale. Not a simple trade in gifts or cash, the ethnographic exchange deals in a currency on par with Georg Simmel’s idea of a higher social unity, sociability.⁴ As

² Internal presentation by Susan Faulkner, Alex Zafiroglu, October 2007.

³ (Ives 1974).

⁴ Donald N. Levine, ed., *Georg Simmel on Individuality and Social Forms* (The University of Chicago, Chicago: 1971), 127-140. Ideas similar to Simmel’s concept of sociability are emerging in contemporary debates in economics and philosophy. See chapter one of Jeremy Rifkin’s new book, *The Empathic Civilization* for an overview. In this chapter, Rifkin joins a number of contemporary economists and philosophers to challenge the idea that humans are individualistic, self-interested actors. These thinkers converge around a common perception that at the core, the fundamental if not ideal human state is one of social connectedness, especially empathic connectedness. Jeremy Rifkin, *The Empathic Civilization: The Race to Global Consciousness in a World in Crisis* (New York: Penguin, 2010), 47-81.

ethnographers, we give audience to a particular social performance. We initiate the particularity with research plans and goals. Our audience frames, in a Bakhtinian sense, the social possibility of a performance.⁵ The performance that unfolds is a measure of the sociability incurred.

Sociability is an ideal measure of human social engagement. According to Simmel, it is deeply democratic, pleasurable and more about unity than individuality. As a measure of exchange in ethnographic practice, it is evidenced in the light touch, a collaborative engagement that actively downplays the power and presence of the fieldworker and showcases the social performance of those studied. From the ethnographer, it requires more social grace than social presence. We are, after all, a relatively polite audience, not the ones who storm the stage.

I have seen this grace at play in remarkable snowball recruiting. While in Mexico, I watched a frequent research partner and consultant, Luis Arnal of in/situm, ease his way into a conversation with a father of two who was paying for his second daughter's coming-of-age party dress. Even without the benefit of Spanish fluency, I could witness the artful social dance whereby Luis charmed himself into the conversation, shared his and my plight (the study of extended family events), learned that of the father and his two daughters (the upcoming coming-of-age ball), and ultimately got us invited to the younger woman's upcoming party (conveniently timed within our fieldwork schedule). It looked like magic: it was not. Luis' congeniality, honesty and enthusiasm opened the possibility whereby the father and his daughters could not only consider inviting us but actually want to invite us to their party. The invitation was extended as part of the moment's pleasurable sociability.

I have also seen instances where such grace was impossible. I hired a team of sociology graduate students in eastern China for the same project but different context: factory laborers off-duty social lives in metropolitan China. In this case, the socio-economic cards were stacked against the graduate students as they struggled to engage with the young laborers. They did not have the social wherewithal to be able to downplay their obvious advantage. The graduate students' sympathy was not empathy and the laborers rightfully sensed a veiled disrespect. Their fieldwork and report suffered.

In contrast, for the same project and same site (PRC), I also hired a relatively inexperienced non-Chinese ethnographer, Elisa Oreglia, who had what my colleagues and I dub "the ethnographer's nose."⁶ Oreglia's intuition on who to engage and how, her ability to empathize and, frankly, then middling Mandarin fluency opened the possibilities for deep, evolving social exchanges that continue to this day. I heard evidence of the honesty, openness and resulting richness of her engagements in her voice on our weekly phone calls. I saw it in the photos she gathered and field notes she wrote. She documented not only the lives of these women, but also the rich and genuine playfulness of the

⁵ Mikhail Bakhtin, *The Dialogic Imagination: Four Essays by Mikhail Bakhtin*, ed. Michael Holquist, trans. Cary Emerson and Michael Holquist (Austin: University of Texas Press, 1991(1986)).

⁶ Elisa Oreglia continued on to develop this intuition into a discipline and skill. She now is completing a graduate degree at University of California, Berkeley, that includes ethnographic fieldwork with the same population, female migrant workers in China, we studied together.

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women’s – researcher and researched – engagement. She documented a truthful performance of their lives.

Unlike market research, ethnography is less concerned with individualized truths. The exchange occurs in broader social and cultural terms. Our ask is for a truthful social performance, one that enacts social and cultural dynamics not isolatable facts of individual behaviors. As a result, we deal in identities, narratives, symbols and artifacts and seek a truthfulness on this scale.

Oreglia’s work revealed an emerging complexity of our work: the need to document in a cyber rich world of self-documentation. The hotel attendants, masseuses and waitresses she interviewed actively participated in a rich Chinese world of digital social networking. QQ had already formed an empire of online playgrounds, avatars, messaging and more. The women’s mobile phones had more photos of themselves than of others. While they did not know how to email, they deftly navigated the local social currency of digital identities on services such as QQ. Oreglia adeptly engaged on their terms and juggled the digitally exchanged symbols, words and images as both additional means of engagement and self-representation.

This gets us to the last step in documentary finesse – the less romantic work of documentation. If our audience and interest invite the ideally sociable exchange, it is up to us to document and catalogue. The social magic of the interview, as we know, is ephemeral unless captured and made accessible for our and other’s interpretation. Decisions must be made at the outset and along the way as to what counts as “data” – field notes, photographs, observation formats, audio recordings, video tapes, etc. This data becomes the trail of crumbs with which to later reconstruct new insights from the work.

Yet I find we collectively drop the ball here. Best case scenarios are when I receive a clearly labeled and cross-referenced folder of photos, audio recordings and field or interview notes along with the next higher order of abstraction, the field reports.⁷ Depending on how familiar and confident I am with my vendor or collaborator, I want more or less detail. The documentation is a tangible expression of the quality of the research engagement. Its richness should invite further analysis, not shut it down because it was too threadbare. I have had perfectly good field engagements with and reports from vendors, but then not re-hired them because I found I had few photos or interview notes with which to continue to build on their insights.

Documentation gives us as ethnographers the tools to take others alongside for the journey from the familiar to the unknown and back again. The finesse comes in capturing telling social

⁷ The work of documentation can detract from the relevant work of analysis. Labeling, transcriptions and transcriptions are tedious and costly. In the field, we make mistakes. Our audio recorder batteries die. We forget our cameras. We lose the opportunity to document. Yet, even then, there is no end to what can be documented as ours is an interpretative craft. A diary entry can replace a lost audio recording or rained on notes. Yes, these all take time and time, as we know, is severely curtailed in current corporate ethnographic work. But my point here is that to bring others along in the analysis, we must leave a trail of crumbs. We must collect and make accessible rich and thoughtful documentation or our research and our analysis extends only as far as our own bodies.

performances so that that journey changes us and our audiences. Without it, we simply record but do not transform. In the corporate environment, this is unforgivable.

JOURNEYING

Several years back, I insisted a friend and I take a ten hour bus ride from central to western Oaxaca, Mexico. I needed to know where we had come from and where we were going, I explained. The bus’s slow pace, the shifting scenery, even the physical discomfort would prepare me for new places and new people. I could arrive less encumbered. The physical journey for me readies my senses and awareness to the unfamiliar. I am not so sure it did so for my friend.

While rarely pleasant, the ethnographic journey from home base to field and back serves a purpose. Our craft is necessarily embodied. The physical transport, the emotional complexities, the infuriating logistics recalibrate our senses. The passage of time and place allows a less violent shedding of the known and smoother transition into the role of the fieldworker. These experiences ground and calibrate our analysis. They also open opportunities for change – our own and our stakeholders. The transition happens in reverse upon return. Long flights allow thoughts to meander. Memories of home remind of preset expectations and a need to resume prior dialogues. Our anxieties coalesce around pre-imposed needs for closure that have yet to be reconciled with what was learned in field.

Victor Turner analyzes similar transitions in his studies of Ndembu “rites de passage.” While he ascribes these rituals to “small-scale, relatively stable and cyclical societies,” I find his description of such rites apt to the relatively standardized corporate practices of research, including ethnography.⁸ Ethnographic journeying for corporations is highly ritualized. Corporate stakeholders expect certain processes and milestones – a plan and mind-boggling preparations, a physical journey to the field, the mystery of fieldwork, the return and the concluding analysis. They hold expectations, set in part by us, and expect returns that ideally orient or even change current practices. While corporate stakeholders may not see the project as a rite of passage, it is, I argue, more powerful when practiced as such.

To Turner’s focus on changes of state, I also add Clifford Geertz’s definition of ritual.⁹ For Geertz, rituals shepherd transition and change. They do not solidify cultures, but invigorate them. As practices, they provide historically agreed upon maps or architectures (for example, a wedding) with which to navigate from pre-established realities (such as not being married) to those afterwards (such as being married). To skimp on any particular phase (for example forgetting to submit the marriage certificate or eloping at the last minute) can place the practitioners in limbo and jeopardize the social recognition of that transition (are they really married?). But Geertz emphasizes that rituals have no clear-cut endings, just posited ones.

⁸ Victor Turner, *The Forest of Symbols: Aspects of Ndembu Ritual*, (Ithaca and London: Cornell University Press, 1967), 93.

⁹ Clifford Geertz, *The Interpretation of Cultures*, (New York: Basic Books, 1973).

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From this perspective, we, as corporate ethnographers, can more powerfully conduct our work if we see it as a ritual. The ethnographic journey, as a ritual, frames the promise and possibility of change, be it new product definition, customer recommendations for future business, or business model options. Crystallized out the outset in the project plan, it lays out an architecture for such change and promises deliverables at the end to catalyze that change, be they concepts for product definition or business development. By embarking on the journey as a ritual, we can chart a tried and true path for achieving such change, even when our deliverables depart from those promised.

It is worth noting here that the corporate value of ethnographic practice is not in validation. Traditional market research better achieves this. Grounds up research, instead, is path-finding. It aims to situate, orient and re-orient. It can be explanatory, but in the corporate environment our work is most valued when it catalyzes strategic change on both small and grand scales. By ritualizing the corporate ethnographic journey, we can borrow from centuries of experience on how to effectively shepherd transition and change.

Unfortunately, in the corporate environment, such journeying is also seen as a luxury. Its financial costs outweigh its analytical returns – the insights do not perceptibly offset the heart stopping travel expenses to inexplicable locations and prolonged absences from the office. Given the economic downturn and general corporate mantra of doing more for less (a favored definition of productivity and promotion), my opportunities to travel to the field and back home have all but evaporated. Even when I hire others to journey on my behalf, I am forced to truncate their efforts. Despite this, my stakeholders still expect the same sense-making and analytical wizardry even though my research partners and I are deprived of the journey as ritual I just romanced.

My guess is that we have all dabbled in what I call the truncated journey. Here the journey is cut into bite-sized pieces and the degree of participation depends on stakeholder status, be it field researcher, project lead (my current role) or higher level decision maker. The truncated journey comes in a variety of flavors, ranging from mini-journeys for busy decision-makers to re-enactments of select elements of the field (demo, prototyped, “day-in-the-life”, etc.). I, as project lead, typically take short dips in the field and then vicariously engage in the ongoing fieldwork and analysis.

How, then, can we squeeze the maximum analytical sense-making, the ethnographic magic, out of the less time in the field? My answer is to redouble the intensity of our fieldwork. To borrow Turner’s terms, this means more time in transition, more time in the limbo of liminality. In our terms, it means more time “in the field.”

To be clear, I am not calling for prolonged fieldwork, but rather an extension of the analytical and even visceral openness that being in the field requires. I achieve this by timing my quick field forays with the first weeks of the project, continuing to participate in the sense-making conversations typical of late night field conversations even after one has left the field, and finally requiring a non-hierarchical collaborative relationship with one’s research compatriots. I learned this from my consultant partners who face the extremes of truncated journeying far more often and far more egregiously than I do.

I have learned to insist on initial shared time in the field in order to build a common, emergent language of the project, one that adds to and also departs from the original project plans. For example, in a wide-ranging project exploring technology and social lives in Mexico, the field team and I spent the first week together dashing from town squares in Veracruz to coming-of-age parties in Puebla. At breakfast, lunch and dinner, we debated how ideas in the office did not suit the practices we witnessed in the field, how the stated project goals presumed too much or too little, how our conversations spanning multiple languages failed to capture what we had experienced thus far. The language we built those first days (from verbal to graphical to gestural) was fundamentally dialogic, to use Mikhail Bakhtin's sense of the word.¹⁰ It framed the emerging realities, ours, theirs, those we observed and all of ours again. As I returned (and they stayed in Veracruz, Puebla and beyond), we continued to talk. The physical, emotional and analytical disorientation of those first few days helped me digest their ongoing insights from the continuing field work.

These long, frequent conversations, during and after the fieldwork, are yet another way to prolong the liminality of fieldwork. I am not talking about progress updates, but rather meandering deep dives into the analytical backwaters of fieldwork. Sometimes we simply rehashed stories from the field, such as how one young Veracruz dancer was climbing the local dancing hierarchy. Other times we debated whether or those living in Mexican towns dominated by the global drug trade could have public coming-of-age parties for their daughters. Mostly we argued about how to describe, categorize and frame the realities they were seeing in the field. These conversations are typically unsettling, particularly for those no longer in the field. They require that the latter again let go of the very moorings to which he or she returned. They are also nerve-wracking because, for as long as we can, we do not insist on reaching analytical closure.

Finally, I have learned to require a fundamentally democratic collaboration, particularly during the more unsettling field analysis. Turner makes clear that the initiates, the fellow journeyers in our case, are and must be equals. This is a funny dance when I am the client and my partners are paid consultants. But hierarchical relationships can limit the symbolic sense-making of fieldwork. To be valuable contributors to the project, all researchers must be willing to lose their moorings – to not know, to analytically if not physically get lost. We must also do so for long enough to know that the return is true to the field and not our various preconceptions.

In the end, I am calling for an intensified, even prolonged period of analytical mashup so that the team can collectively build a common symbolic and narrative fluency. This can be done in shorter periods of time if one pays attention to how the ethnographic journey as a rite of passage is architected. Preparations and plans are but agreed upon starting points.¹¹ Fieldwork is the time for

¹⁰ (Bakhtin 1991).

¹¹ I prefer to see project plans as early, agreed upon frames of reference, to again borrow Bakhtin's terminology. (Bakhtin, 1991). As a preparatory artifact, they organizationally justify the project in the corporate language of goals, timelines, budgets and stakeholders. Because our fieldwork takes us far from the office, these plans also frame how our work will both proceed and be evaluated upon our return. Yet, as such a frame, they can be debated. They can be wrong. That in itself is revelatory and worth the investment.

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unchartered analysis. Returns are fraught with need to analytically link beginnings, middles and ends, with the anxiety increasing when ends depart farthest from initial expectations. The fluency gained during the fieldwork smoothes this last phase.

To most effectively navigate the analytical disorientation and reorientation of fieldwork, I also prefer to hire experienced ethnographers who are also local to my field sites. Chosen well, they can accelerate the symbolic and narrative sense-making so critical to the journeying. As local experts, they make quicker sense out of my project and its limitations and can more facilely point me in the right directions. As fellow ethnographers, they understand the research method and its analytical and bodily demands.

Choosing the right collaborators can be tricky. Sometimes I hit the jackpot and find incisive ethnographers who can take rich field experiences and translate them into actionable, business insights. Often, I compromise. Some trade-offs work better than others. For me, the “ethnographer’s nose,” such as Oreglia’s gut grace and social sensibility, trumps business acumen, in the case of the Chinese market researcher I sent to the wilds of lower Himalayan China. Occasionally, I hire the local expert who spends more time demonstrating his or her expertise rather than exploring the project’s unique possibilities for dialogue. These fieldtrips quickly devolve into a guided tour, at worst replete with clichés and at best an insightful monologue.

The role of the local expert as fellow dialogic journeyman stands out in sharper relief in the case of the executive fieldtrip or “ethnographic tour.” As ethnographers, we are trained in the ritualistic elements of the journey, in particular how to manage the disorientation and reorientation of the liminal experience. The executives we take into the field are not. I have seen remarkably successful executive journeys. In the most successful case, the ethnographer and executive were kindred spirits, both explorers who reveled in the unknown. Both believed in the transformative promise of ethnographic practice, even if unsure how it would unfold at the end. From this case, my group gained an executive champion of corporate ethnography as well as an emerging practice of business innovation that put ethnographic research up front and center.

Not all corporate decision-makers make good candidates for fellow journeyers. Nor do all ethnographers make effective executive guides. My colleagues and I have learned that non-ethnographers must be carefully prepped not only on how the physical journey unfolds but also how the analytical journey progresses. They must become ethnographic initiates. We also learned to take on the role of coach and guide, much like my vendors do with me. However, in the executive journey, the sense-making shifts from cultural to business. The scope of the dialogue broadens, often beyond my comfort zone. Without the chops to fruitfully continue the dialogue, the generative opportunities to disorient and then reorient can diminish. The risk is that prior assumptions remain unquestioned and the return feels flat and time feels wasted.

As ethnographic practitioners, we have additional means of enhancing the journey’s sense-making. In our corporate practice, we do not often talk about them. It is as if they are our dirty secrets. But, frankly, I hear glimmers here and there. A reference to an ongoing diary scribbled late at night, a poem that makes far more sense than an orderly analysis, or a tattoo that marks the body with the residue of

our trials and travels. We talk about extreme exhaustion or jet lag and the trance-like states they bring. Ethnographers have long sketched and meditated to sort symbolic sense out of the worlds surrounding us. Nor are we the only ones who seek to render the culturally unknown known. Carl Jung drew mandalas to anchor himself amidst a shifting, in his case psychological, terrain.¹² Michael Harner symbolically and metaphorically journeys as a shamanic healer.¹³ Both are alternative means of making visible the symbolic semantics of human life. They and others can offer additional tools for rendering tangible the ethnographic experience.

It is a mistake to underestimate the effect of the journey well-taken, even if radically shortened. The process is so powerful, so transformative that we, as humans, have long used it to signal transformation and change. It is woven into the myths of heroism and language of conquest. Shamans use it to justify the powers they bring back from other worlds. Centuries of writers have anchored complex tales of upheaval and change into the literary trope of a path taken (and those not). As ethnographers, we both journey and, upon return, narrate our journeys. Both differentiate our craft from other corporate research practices (even at risk of becoming our Achilles' heel). Wielded carefully, both can act as powerful agents of corporate change.

Corporations require one thing from ethnography: the ability to effect change. If we do not change corporate practice (from product definition to sales and marketing practices), we fail. As consultants, we lose our clients. As in-house researchers, we lose our jobs. It is that simple. A well-crafted ethnographic journey, short or not, shepherds that change.

DISCIPLINE

To master the social sensibility of documentary finesse and the ritualized sense-making of journeying requires discipline, a discipline that is more yogic than Foucaultian.¹⁴ For Foucault, disciplinary practices ensnare us in the workings of power. At their core, they demean. They generate little more than themselves. In contrast, yogic practice associates discipline with enrichment. The repetition of bodily movement opens up possibilities for deepened awareness. To see again and again and from all angles is to more deeply learn. In this way, yoga is about the unending richness of consciousness.

Applied to corporate ethnography, the yogic disciplinary mindset opens up the myriad possibilities of interpretative sense-making. Even beyond the project. Here then lies the longevity of ethnographic practice. Disciplined attention to the social dynamics of documentation and the rituals of journeying allows us review our work and continue to reap insights relevant to the unfolding business matters at hand.

¹² C. G. Jung, *Memories, Dreams, Reflections*, ed. Aniela Jaffe, trans. Clara Winston and Richard Winston (New York: Random House, 1989 (1961, 1962, 1963)).

¹³ Michael Harner, *The Way of the Shaman* (New York: HarperCollins, 1990 (1980)).

¹⁴ Michel Foucault, *The Archaeology of Knowledge* (New York: Pantheon, 1972).

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My former colleague, Lang Xueming, and I continue to refer to research we conducted on Chinese iCafe frequenters in 2006. At the time, the research provided fodder to catalyze a hotly contested about face on upcoming product refresh plans. But the stories Xueming and I debated while he traveled in the field, the photos he took of young men and women chatting, gaming and playing in iCafes and the deeply collaborative process by which we figured out what he was witnessing and what was and was not relevant to the current business questions at hand (the upcoming product refresh) inspired three years of follow-on research on PRC migrant workers, emerging market sociability and global trends in digital publishing. This research continues to fuel our ongoing conversations on the vibrancy of Chinese social media. Although in 2006 Xueming was a novice ethnographer, he was highly disciplined in the yogic sense. His ability to learn and re-learn from his research was infectious and as a result, he both directly (multiple product roadmaps) and indirectly (follow-on research directions), influenced Intel’s corporate practices.

The yogic practice locates creativity and change in repetition. It does not seek out the new. As a practice, it follows centuries of carefully documented and repeated movement of the body through physical and energetic space. Such movements would be prescriptive except the generative possibility of yoga lies in what can be learned by witnessing each repetition. No yogic stance, no matter how prescribed, is ever the same if one can muster an ability to pay attention to all that defines each moment of practice. The practice, because it is architecturally the same, allows the yogic practitioner to also pay attention to the intricacies of his or her awareness.

In this way, yoga, like cultural analysis, is an interpretative science. The significance of each stance evolves with one’s ability to perceive it. Geertz jokes that the interpretation of symbols is turtles all the way down, that there is no end to the possibilities of cultural analysis.¹⁵ It is easy to get lost. Hence, the call for discipline. Geertz calls such discipline the “refinement of debate.”¹⁶ I borrow from yoga the necessity of honing our awareness so that it can deepen and grow. With social grace and ritualized journeying, we can focus on the sense-making of our fieldwork. With rigorous documentation and generative dialogue, we can enrich our interpretation. Add to this an additional element, the yogic call for generative learning through repetition.

After twenty years of practice, I remain most impressed with the ethnographers who attentively (if not relentlessly) explore the interpretative possibilities of their research plans and the field’s rebuttal. These are not ethnographers who rest content with the pleasurable, dialogic flow of ethnographic sense-making or powerful capture of a cultural moment. Instead, they endlessly query the project and unfolding insights from as many perspectives as they can muster. Normal society might call them obsessive compulsive. From a yogic point of view, they would be masters.

¹⁵ To quote Geertz at length, “There is an Indian story – at least I heard it was an Indian story – about an Englishman who, having been told that the world rested on a platform which rested on the back of an elephant which rested on the back of a turtle, asked (perhaps he was an ethnographer; it is the way they behave), what did the turtle rest on? Another turtle. And that turtle? “Ah, Sahib, after that it is turtles all the way down.” (Geertz, 1973), 28-29.

¹⁶ (Geertz, 1973), 29.

The point here is disciplined ethnographers are generative. One study on reading produced not only eloquent narratives of reading as a practice but also a grassroots history of publishing diasporas, taxonomies of different types of readers and finally maps charting their reading practices. That was just nine weeks of work. Another exploration of math teaching and learning knitted together government math curricula with chaos in the classroom to elicit an abstract equation eloquently illustrating how math teaching and learning progressed. The yogic practitioner circles the yogic stance looking for the shift in awareness that allows for a leap in consciousness. These ethnographers, likewise, circled our business questions (what are contemporary reading practices, what constitutes math teaching and learning) from many angles resulting, I argue, in similar analytical leaps.

Practiced attentively, ours can be a disciplined art. Practiced masterfully, our analysis can be intense, immersive, rigorous, deeply collaborative, endlessly curious and profoundly social. Ethnographic masters revel in a detail overturned to reveal yet another. The result is the rendering conscious and ultimately visible the logics and patterns of human social life. This is the Dao, the “doh.”

AN ENDING

I end this article with a second confession that explains my title. I have watched far more martial arts movies and read more than enough martial arts novels than is socially healthy. For better or for worse, I am steeped in the lore of the “Dao” (that is Chinese for “doh” or “the way”). So, I hazard three parallels between the “Dao” of the martial and the ethnographic arts. The first: the Dao is an embodied practice. Think of Jackie Chan or the Shaolin monks. A “pow,” a “thwack” and an “oomph.” Progress typically hurts. Secondly, the “Dao” requires rigorous, repetitive training (although in the movies there is always the promise of a mystical shortcut, or else things get terribly dull). Finally, at the end, there is a righteous transformation: this is the way of the Dao. While the scenes of our work are rarely as lush (or violent) as martial arts lore, the art of our work follows a similarly rich practice – embodied (go to the field), repetitive (go to the field again) and immersive (be the field) – all with the promise of change upon return. Hence the title of this paper. Ours is an art like the martial arts. Both practice the “Dao.”

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The ‘Inner Game’ of Ethnography

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Ethnography’s external outputs such as contextual photos, process models, and personas have overshadowed the actual ‘way’ of practicing ethnography (which has remained largely immune to normative standards). This paper will argue the time has come to re-embrace a sense of craft and that renewal can be catalyzed by putting individual performance at the center of ethnographic practice. Beginning from practitioners’ typical feelings of discontent with the lost potential inherent in most ethnographic encounters, this paper will look for the embodied foundations of a more disciplined way forward. Drawing on awareness techniques from the human potential movement, (that have themselves been adapted to concentration-intensive sports like tennis) this paper proposes a turn towards the ‘inner game’ of ethnography. As this leads practitioners to tighten norms on today’s unseen ethnographic practices, it can end the double-game between inner and outer standards and increase the discipline’s authority.

We should have a great fewer disputes in this world if words were taken for what they are, the signs of our ideas only, and not for things themselves. *John Locke*

VIVA ETHNOGRAPHY!

Ethnography has won its battle for legitimacy. Never before have the fruits of ethnographic research been more widespread or the word ‘ethnography’ more name-checked. The newspapers may freshly re-discover “anthropologists in the supermarket” every few years, but as a business research methodology there can be little doubt ethnography is now in the core repertoire. Much more than anthropology, ethnography has gone beyond its prior existence and acquired the status of a ‘brand’. (Suchman, 2000) And it is a brand which is no longer even that exotic. With Neuroscience the current hot ticket item among corporate research buyers, ethnography now seems less ‘aspirational’ than simply attainable. Ethnographers of the world unite and join your client’s long-term vendor rosters!

A tale of two bubbles

But victory often presents herself as double-sided, if not completely pyrrhic. Such was the case when Robert Fabricant (Creative VP of Frog Design) came to speak at the 2009 IIT Design Research Conference. In a presentation that was tongue-in-cheek on one level (yet immensely revealing on others) he tracked the fortunes of what he termed the “ethnography bubble”.

There were two bellwethers for his analysis. The first was US house prices which he showed following their familiar upward spiral until the debacle of 2008. With a deft overlay he then revealed a shadowing line that showed how spending on contextual and other “non-traditional research” seemed pegged to the upward rise of house prices until they began their steep descent. Yes, that doppelganger on the graph was us, our profession, on the rise.

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Yet, despite calling it a bubble, what Fabricant’s figures showed were that spending on contextual research continued to rise even after house prices crashed – in other words that ethnography spending was more resilient than housing and as such ‘our’ bubble had been prolonged. This was a clear case of ‘irrational exuberance’ (in Greenspan’s notorious phrase) gone unchecked.

The second bellwether was erstwhile Nokia Researcher Jan Chipchase and his photoblog ‘Future Perfect’. Fabricant chronicled how Chipchase’s rise to prominence (from obscure San Francisco design conference in 2005 to the cover of the New York Times Magazine in 2008) dovetailed with the steepest upsurge in the contextual research market. He furthermore suggested that in raising the profile of ethnography, Chipchase had been a contributing factor to recommendations like a Harvard Business Review article (Rigby, Gruver and Allen, 2009) that advises multinationals preparing for R&D 2.0 to staff 40% of their emerging market labs with social scientists. Fabricant also added some cultural commentary: “*But (Chipchase) was doing a lot more than that, he was also selling a lifestyle...a lifestyle of travel and glamour*” (Fabricant, 2009).

Nomadology

We can’t say what Chipchase’s modus operandi is for sure (the ‘Research Methods’ sections of his blog are as terse and elliptical as his other posts). But if by his output we can know him (and try to assimilate his contribution into the ethnographic oeuvre) we might call him an “ethno-flaneur”. (Benjamin, 1973:35) He roams the globe having brief encounters in the streets with locals wherever he goes; many of these interactions involve mobile phones; and he takes great numbers of photographs of people using these and other technologies in context. His Airmiles eclipse the US-based wanderings of the Clooney character in ‘Up in the Air’; and he prefers the kind of locations beloved of anthropologists but chided by P J O’ Rourke in ‘Holidays in Hell’ (Ghana, Kazakhstan, Afghanistan).

Tellingly, what we could archly term the ‘The Chipchase Index’ (of our disciplinary health) is also a powerful emblem for the ambivalent status of ethnography in industry. This is a world where clients seem to want what you do, but you are not sure the kind of ethnography you *believe* in doing, is exactly what they want. How should we react when one of the most famous supposed examples of our discipline is also the most atypical? When a media icon for our profession is not a very good role model for how its work actually gets done? (...Or his images the best advertisement for the involved outcomes ethnographic research really delivers?). A further question is; once public mindshare for a conceptual category has been captured in a particular way, how long does it take to re-claim and re-frame it?

My point for the EPIC audience is simply that we practitioners trying to follow ‘the way of ethnography’ do not control the extension of this word in the wider world. And however hard we may try to shape the understanding of ethnography, the concrete images of it that get most widely disseminated can hold more sway in characterizing what we do.

If the objective correlative for ethnography in its classic phase was the hardbound monograph that captured all the “lifeways” of a certain people from their Ritual to Politics to Religion (think of

Malinowski’s ‘Coral Gardens and Their Magic’ or Evans-Pritchard’s ‘The Nuer’), we can understand this encyclopedic ambition. It is an extension of the impulse that led Napoleon to send antiquarians to Africa with his armies in order to compile the ‘Description of Egypt’. The goal was the Enlightenment desire for a comprehensive accumulation of knowledge on an isolatable subject.

But if in a similar vein we can view the photoblog as the objective correlative of the new “online ethnography”, what is its ambition? To portray “being there” with distant others, to be seen to be there, to serve up ethno-snacks of insight about local life and product use, and then move on to a new location? That may be a fine goal for one particular format (closer to the virtues of travel writing than social science it must be said); but what if because of their wide extension such formats begin to shift the understanding of ethnography as a whole?

THE ‘WAY’ OF ETHNOGRAPHY IS DEAD?

In other words, what we have been arguing is that in industry “doing ethnography” has come to be identified with what we would call its ‘outer game’; while the actual way of practicing ethnography has remained a ‘black box’. What goes on *inside* this box has remained largely immune to normative standards (save for expert communities like EPIC or competing research firms trying to out-authenticate each other). It would be absurd to attribute this shift of meaning to one or all the photoblogs that use the word ‘ethnography’. The focus on ethnography’s deliverables rather than its research practices is something many of its practitioners are responsible for. It was a key part of the legitimization of this discipline within business. It was achieved through 15 years in which the attention of industry professionals were focused on shoring up the value of this form of research, by ensuring that it offered ‘outcomes’ which offered ‘value’ to the organizations paying for it.

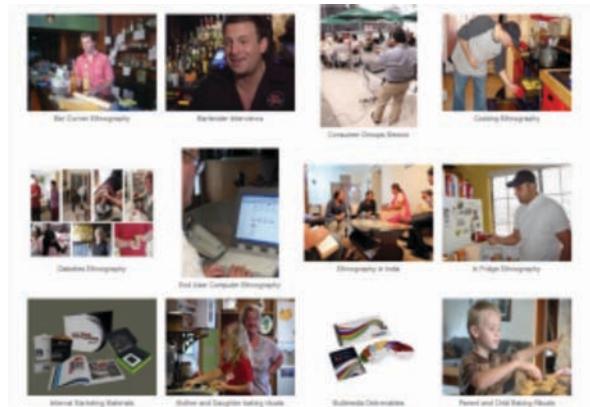
Imagology

Five years ago at the first EPIC there was a workshop entitled “Crazy Eddie and the Selling of Ethnography” (Cotton, 2005). “Crazy Eddie” (the archetype of the hyperactive used car salesman on local TV) was an apt figure to evoke the mind frame many ethnographic practitioners felt required to maintain. In order to win projects in which we could ply our trade, we found that we first had to SELL, SELL, SELL and NOW, NOW, NOW to keep our research teams afloat.

Over time we learned that the more tangible, accessible ‘things’ we gave our clients, the easier our sales justifications went. So we looked for the hardest working tools and made these deliverables the focal outputs of our ethnographic projects. This transition was part of a necessary adaptation for a discipline moving out from academic contexts. The thinkers and practitioners who created these formats for making the results of ethnographic research actionable are responsible for carving out the hybrid space that EPIC occupies (and in which many of us still work today) (Robinson, 1994, Blomberg et al., 2003, and Dubberley, 2009 are a few of the key pioneers). Their innovations were true results of praxis and translation across domains of human experience and contexts of application. But as with any innovation, after the forms are laid down, imitators move in and adopt them without the

same rigor or spirit. (Or in Japanese terms, they adopt the ‘KATA’ without applying its ‘DO’ (McCann, 2010, this volume).

Consequently, now any research output that looks like this:



Or these:



...And uses words like ‘ritual’, ‘in-context’ or ‘at-home’, can claim to be ‘ethnography’.

The result over time has been that commercial ethnographic work has become more of a *genre* of research output and a *rhetoric* supporting the user/customer-centeredness of products than a coherent research methodology (or theoretical orientation). Experience models, ‘customer journey’ charts, user personas, needs maps, and opportunity matrices have to a large extent overshadowed the work of doing ethnography itself and (as common targets) these types of deliverables are often *all* that unite many industry ethnographers in terms of practice. While the word ‘ethnography’ may be thriving in industry research, any consensual ‘way’ of carrying it out is lacking. While we know there is great diversity of practice even within the EPIC community, how many thousands of others that sell their work under this name do not bother to take part or even share our concerns?

THE 'INNER GAME' OF ETHNOGRAPHY

This paper argues that now we can end our focus on the *selling* ethnography (since its legitimization is nearly complete) the time has come to re-embrace a sense of craft whereby our standards are self- and community-defined (rather than limited by the external marketplace). But rather than believing this movement *must* be catalyzed by regular engagement with 'communities of practice' (CoP) (Lave and Wegner, 1991), I put individual *performance* at the center of ethnographic practice. Norms of practice will not diffuse from even distributed formal bodies unless there is individual desire to change and experiential recognition that "improvement" is possible.

Playing the game

I believe that our discipline already maintains these conditions; and to begin we need only connect with ethnographer's general feelings of discontent, that in most research encounters (and across whole projects) there is much more that they could have learned that was not achieved. The phenomenon of researcher regret is well known in academic contexts and often occasions re-studies to "go back into the field" for following up lines of inquiry that did not occur to the researcher while there the first time. (Ellen, 1984) In commercial work the effect is lessened by the fact that one's clients can still be 'fully satisfied' with your work and not even aware of the 'more' that could have been achieved. Yet it remains a palpable post-project sensation among researchers themselves, often referenced with the phrase, "If only we had had some more time, what we *could have* done then..."

In short, I locate the individual motivation towards continual learning and authoritativeness in ethnography in the untapped potential inherent in every ethnographic encounter (the paths not taken, the opportunities researchers feel did not need to be wasted *if only* they had been more aware 'in the moment', more responsive to a participant, more reflective while planning the research). But to take advantage of such disquiet to motivate change a switch needs to be made. We can do this by drawing on the concepts and techniques of the human potential movement, which have already been adapted for concentration-intensive sports like tennis. Therefore, this paper proposes a turn towards the 'inner game' of ethnography as one route toward wider mastery of ethnographic practice.

"In every human endeavor there are two arenas of engagement: the outer and the inner. The outer game is played on an external arena to overcome external obstacles to reach an external goal. The inner game takes place within the mind of the player and is played against such obstacles as fear, self-doubt, lapses in focus, and limiting concepts or assumptions. The inner game is played to overcome the self-imposed obstacles that prevent an individual or team from accessing their full potential" (Gallwey, 1974:13).

For most of the history of ethnographic research in industry we have focused on playing an 'outer game' of shoring up legitimacy and pleasing clients. This has been successful in establishing our own marketspace, but the principles that allowed us reach this point will probably not enable the strongest future growth. (Already the forces of ethnographic de-skilling have been well documented in this

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forum, enabled by allowing a holistic discipline like ethnography to be treated like an industrial process and broken up into piece-work). (Lombardi, 2009). Further development in this direction will likely lead to commoditization and a type of ethnography few of us would recognize or want to practice.

Timothy Gallwey was a Harvard University tennis Team Captain and later tennis pro who in the 70's spent time in an ashram learning meditation. While he first credited his increased concentration with improving his own game; he went further and began to apply these principles to the way he trained his tennis students. This lead to his creation of the 'Inner Game' method which Gallwey has since promulgated in eight different books that have seen him become a pioneer and leading thinker in business coaching after his start in athletics. But what does he have to say to us as ethnographers? Firstly, he offers the insight that any wholly external focus will ultimately limit performance, whereas the potential for self-improvement is boundless, and a surer route to craftsmanship. But the true relevance of applying such potential-enhancing regimes to a discipline like ethnography becomes apparent when one explains that it involves adopting awareness techniques (derived from both yogic meditation and Zen archery) that allow one to make non-judgmental observations of 'critical variables' of performance and adjust them within the flow of an activity. The possible gains for field ethnographers are obvious: deeper concentration for listening and observations, closer attunement with participants, and more awareness of the boundary between perception and interpretation. In epistemological terms, this amounts to a form of innate researcher 'reflexivity' based on meta-cognitive principles.

So my intentions in introducing Gallwey to this audience are not mere eclecticism, nor motivated by his 'Eastern' connections at this first Asian EPIC. Rather, I think we can apply his synthesis of meditation to sports for improving our own sense of craft and discipline. His books are clear demonstrations of the power of embodiment; and how to transform external 'techniques' into internalized practices, that can then be honed all the better for being embedded. The key concept Gallwey draws on to effect this transformation is the action of "muscle memory" which he has seen and manipulated thousands of times in teaching tennis players to maintain their serves and backhands. Using this approach draws on the idea that every movement a body makes is storing a pattern in the muscles that it will draw on the next time it tries a similar move. Instead of the old way of teaching players by getting them to keep words in their heads like "bring your racquet back", their bodies are put in the right positions and players are primed to go back to the same "feeling" encoded in these positions at the right moments of a game. Or in other words, the 'body' is taught to respond without much interference from the mind.

Gallwey goes on to repeatedly document how too much thinking and self-criticism leads players to "try too hard" and psychically generate overpowering muscle responses that lead to poor play. Ethnographic research and interviewing are seemingly more 'cognitive' activities than tennis or golf (the focus of Gallwey's second book). But I would argue many of his principles not only apply, but would lead to a more empathic practice of ethnography if applied to our discipline. We too could profit by cultivating the same 'feel' for situations in which the right responses (like gentle probes) were generated without distracting mental re-direction. A cogent example here for ethnographers is the problem of over-thinking and the inattention that it can lead to during interviewing. And here Gallwey has something to say (from a latter book on work) that sounds almost meant for us:

"The task of listening to another person is not that different from that of focusing on a tennis ball. The other person's voice is coming toward you and you are going to have to respond. **What are you thinking and feeling while the communication is coming your way?** Do you feel like a tennis player who is threatened by a hard shot at his backhand...Just as with a defensive player such a person is subject to a cycle of self-interference...Do I really need to make comments to myself or rehearse my response while the other person is talking? When I am listening more fully, the other person notices that attention is being paid and often starts speaking and listening in a more focused way. The result can be a general improvement in the quality of communication both ways." (Gallwey, 2000:59)

How many of us are guilty of engaging in 'early analysis' during the middle of interviews and not fully hearing and thereby responding to what our informants have been saying? Some of us probably do this chronically and don't even think it could be a problem. If this is one's habit, how many of us might have systematically shut down our informants and caused them not to share whole regions of their experience? What we might have heard could have changed our thinking about an issue or the overall outcomes of our research. Yet we rarely allow ourselves to think such lapses have downgraded the quality of our deliverables. And for the most part our clients are none the wiser, not being regularly present for the nitty-gritty. This is why our standards have to be self-monitoring and internalized; it is only you who are there all the time.

The other reason is because ethnography is not merely a 'perspective' or a 'methodology' that gets used in research design, is written up in project agreements, and then the researcher can do what he likes. Ethnography at its most basic level is a series of performative events, and at any moment within the flow of an ethnographic research encounter (just like in tennis) you can lose your concentration, screw up, and the proceedings cease to be ethnographic. Anytime we cut off an informant, show disinterest or disgust, stop listening altogether, or try to push a participant into accepting a concept, we have failed the 'way' of ethnography. I do believe there is a '**core**' to ethnography, and it pivots around the quality of interchange between the researcher and the participant. If we are willing to sometimes be flexible about the amount of context investigated in a project, or the degree of holistic content we take in from our informant's wider lives, here is where we have to stand firm. If we cease to be *emic*, (to seek to elicit our informant's own view of the world and let them guide us there) then we have parted ways with ethnography. And if these kinds of events happen regularly within a work stream, then this project's deliverables will be *less than* they could be; and it will become increasingly fictitious to call this output 'ethnographic research'.

Encoding

So ethnographic research (like all disciplines or 'DO' in Japan including martial arts) probably needs a code. Some of the possible items in this code may appear variably ethical and epistemological:

- display 'unconditional positive regard' towards your participants,
- maintain neutrality to the content of their responses
- respond attentively in replies and make sure your participants feel heard

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But none probably exemplify the interrelatedness of these dimensions more than Spradley’s injunction “don’t ask for meaning, ask for use” (1979:81). Seemingly a way to ensure that one gets more concrete examples during an interview, Spradley details how easily probing an informant for meaning can be perceived as a frontal assault on their character that risks shutting down an interview. Yet it has become fashionable for novice researchers to attempt “laddering” in interviews. This involves repeatedly pillorying an informant with the question ‘Why?’ after each successive explanation until they reach some suitably ‘deeper motivation’ (usually the same three). Keeping to an ethnographic code would make it natural to avoid such blunders. It is commonplace in doing our work to hear the truism that the ethnographer him or herself is the chief research instrument. Yet we devote little time to attuning this instrument internally, and much more on elicitation from ethnographic others. When practicing a “social” science the norms of focus may always encourage us to be outer-directed, but when your work involves tight dyads of self-and-other, you need tools for monitoring both sides of this relationship.

Despite the connotations of a term like ‘code’, I mean something less formal and more tacit than a ‘code of practice’. I would furthermore argue that it is these kinds of practices above (comprising the minimal conditions for ‘doing ethnography’) which attention to the ‘inner game’ has the power to make embodied. Gallwey writes about the “Groove Theory of Habits” (1974:78) which explains how patterns or grooves are built up in our behavior every time we do something a certain way. The more occasions we do something one way, the higher the probability we will do it that same way again. This is good news if we have developed strong habits, but problematic if we have not. If we want to change our habits we can’t just tell ourselves to change. (Here is the cognitive fallacy again.) Instead we have to wear new grooves into our behavior through repetition. Now ‘ethnographic habits’ is not a phrase I have heard very often. We are taught and teach others to think about ethnography as a body of theory, or an approach, or as a group of techniques. But even technique still sounds like something you study (and talk about) rather than “groove” into your being. That is because as a discipline we have been focusing on the ‘outer game’ for so long, the only chance most of us get to ‘practice’ our ethnographic habits is when we are conducting it for real. And then afterwards all our effort shifts to what the informants reported and what we are going to make out of their responses.

We need more occasions to practice the ‘inner game’ of ethnography and develop it. For I believe the type of code elements described above *can* work like the ‘muscle memory of ethnography’ once practitioners have a chance to encode and make them automatic. For monitoring one’s practice I propose that something like the “non-judgmental observation of performance” that Gallwey recommends could achieve a balance of control and lightness that would bring discipline without self-critical interference. Furthermore, one could attune one’s awareness to focus on those ‘critical variables’ that keep one’s research ethnographic (as well as towards more specific project variables). More attention here will likewise have the byproduct of encouraging practitioners to engage with their ‘communities of practice’ once they care enough to seek guidance within desired areas of growth.

Coda

To expand the ‘inner game’ some parts of the dominant external focus will have to give ground. “Good enough for my clients” should be renounced as a sufficient quality standard for any practitioners seeking to fulfill their potential. Hopefully, this dynamic will normatively move the discipline and collaborator’s attention to the unseen standards of how ethnography is actually practiced. This will strengthen the output of practitioners as a whole, since the power of deliverables in the ‘outer game’ has always depended on the quality of the input (and honesty) within the inner one of planning and execution. Over time this dialectic will expand the zone of transparency until finally the inner-outer duality ceases to describe a normative difference and collaborators expect such standards generally. Increasing the focus on today’s ethnographic ‘inner game’ is thus one ‘way’ towards the future of a discipline with greater authority that more closely fulfills its promise.

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Making Silence Matter: The Place of the Absences in Ethnography

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Professional and organizational attention in recent years to what ethnographers can and cannot disclose as part of their research accounts has extended the range and relevance of concerns pertaining to the relation between investigators and those they study. When researchers are working under conditions characterised by secrecy and a limited access to information, then the difficulties faced in offering accounts are all the more acute. This presentation examines the political, ethical, and epistemological challenges associated with how we manage what is missing within our writing. The argument is based on an ethnographic-type engagement over a five-year period. I want to consider the representational implications of the disclosure rules, confidentiality agreements, informal arrangements, etc. associated with contemporary research; in particular their implications for how knowledge claims are substantiated and reproduced. I also want to go further though to ask what novel writing strategies and methods could enable us to undertake a critical and evocative engagement with the worlds we study, while also respecting the limitations on what can be communicated. My basic orientation has been to seek forms of writing that exemplify the negotiation of disclosure and concealment between investigators and those they study in the relation between authors and their readers. In doing so, a goal has been to determine how limits to what can be said could figure as a productive part of our research accounts.

INTRODUCTION

Within qualitative traditions, recurring questions have been posed about the status of research accounts. Secrecy - as so often experienced as part of organisational life - raises at least two sets of concerns in this regard: whether we as researchers can gain an adequate appreciation of the situations under study and to what extent we can (and should) discuss them in light of the disclosure rules, confidentiality agreements, and other such provisions in place.

An aim of this background paper to the conference is to ask how the highlighting of secrets and absences could be part of efforts to do justice to our understanding of the social world. This is done by shifting away from only treating limits on what can be stated as barriers to representation. Instead, I want to ask how limits and silences could be incorporated within our writing in order to convey experience. Much of the argument amounts to a meta-analysis of the book *Experimental Secrets* (Rappert, 2009) that detailed the author's engagement in diplomatic and security communities.

CONVEYING, IGNORANCE, AND SECRECY

Secrecy, understood as the deliberate concealment of information, is pervasive across social, commercial, and public life. The family, personal relations, and private enterprises are just some of the sites where the dynamics of concealment are highly pertinent. Although secrecy is often portrayed as the antithesis of transparency, it can have implications far beyond restricting who gets access to what. The manner in which secrets are kept can shape identities and organizational relations (e.g., Gusterson, 1996; Masco, 2002; Rappert and Balmer, 2007). Secrets are actively maintained in ways that define relationships and identities (e.g., Masco 2002; Gusterson, 1996).

With reference to such expansive conceptualizations, secrets have been defined according to the content of the information concealed, the consequences of its disclosure, and the methods by which information is told (Bellman 1981). Taussig (2003) and De Jong (2007) are among those who have underscored the importance of orientating to secrecy as a social practice, where its relevance for interaction derives from what is done through acts of *telling*.

The importance of attending to the ‘productive’ aspects of secrecy is underscored by the (re-)emerging academic attention to ignorance. Traditionally, the social sciences have taken knowledge as their topic - how claims about the world are produced, secured, shared, contested, entrenched, etc. Less commonplace have been attempts that start with how individuals and organizations seek ignorance. Yet recent studies have sought to elaborate the usefulness of claims to ignorance (Stocking and Holstein 1993; Proctor and Schiebinger 2008). For instance, it can be embraced - if not outright deliberately manufactured through the strategic concealment of information - as a way of diverting, deflecting, or denying culpability (McGoey, 2007).

Concerns about the pervasiveness and performativity of secrets are not just matters *of study* for researchers, but also *relevant to* the production of analysis. Maintaining the confidentiality or anonymity of those being researched or those work is undertaken for is just one of the ways our accounts entail acts of deliberate concealment. The ethical dimensions of what is left in and left out of research accounts vis-à-vis those studied have been subject to much commentary (e.g., Lee 1993; Murphy and Dingwall 2007). More widely, there are reasons to maintain that how we as ethnographers tell secrets will become an even more prevalent topic of concern over time. First, government and national funding streams in many countries in Europe and elsewhere are prioritizing social research with high social ‘impact’ and ‘relevance’ (e.g., Oreszczyn and Carr, 2008). As part of this, investigators are being encouraged to enter into collaborations with so called ‘users’ about the design and goals of research. While such a movement poses many opportunities, it also heightens certain concerns about what can be shared and to who that are commonplace in the context of ethnography praxis in the industry. Not least among these in relation to this presentation are the dilemmas of what to reveal of our research experiences while being immersed in dense and shifting sets of rule-based and informal relations (Baez, 2002). Second, the increasingly widespread adoption of institutional research ethics evaluation and monitoring in industry and academia heightens attention to and establishes a bureaucratic mechanism for establishing what can and can not be disclosed (Conn, 2008; Wiles et al., 2006).

Unfortunately though, the conventional orientations of social studies typically relegate to a neat footnote (if that) a consideration of the representational and epistemological implications of what they leave out (see Nespor, 1990). While concerns about the ethical relations to those studied are a matter of extensive commentary (see Jones et al., 2006; see Baez 2002; Ellis 2007), the literature is much less well developed outside of concerns that might be labelled under ‘research ethics’. More generally, there are reasons for maintaining researchers should pay more attention to the implications of what is left out of their accounts. For instance, while recent studies of ignorance have posed probing questions about the importance of absences, ambiguities, and unknowns in public affairs, these have been directed at identifying and unmasking the uses of ignorance by those under study: for instance, tobacco companies, global warming skeptics, and government regulatory bodies. Far less attention has

been given to how social studies rely on, reproduce, or craft ignorance because of what is left out of their accounts.

The goal in the remainder of this paper is to ask how what is absent could purposefully function as a creative aspect of ethnographic writing.

The overall strategy advocated is to exemplify the negotiation of what is disclosed and what is hidden in the social world within our narratives.¹ The proposal here is to find ways of understanding the place of secrets in the social world through attending to what is left out of our accounts. In this way, what is sought is to use the ‘interplays of silence and absence that reside in between what is articulated and what might also be true’ (Goodall, 2006: 62) in order to convey what we understand to be the case. As will be maintained, attending to the place of absences can provide a basis for inquiring into what our ‘revelations’ constitute and how they are constituted.

These contentions are developed through recounting strategies adopted for writing about my engagement over five years in international diplomatic deliberations in the area of arms control; most especially my involvement in the development of international codes of conduct to prevent the life sciences from contributing to the development of new weaponry (see Rappert, 2009). Within that area, the predominant focus for this paper will be with my participation in numerous open and closed policy meetings, seminars, and symposiums where this option and wider concerns about biothreats were formally and informally deliberated. As will become clear soon, in practice, what can be said to whom from such settings is up for negotiation. No doubt, some participants will regard as much stronger the commercial disclosure agreements in industry that are policed through legal systems. Yet, the argument of this paper should be relevant to settings with tighter arrangements. This is so because concealing in social life almost always leaves traces. Maintaining total secrecy requires keeping secrets secret, and sometimes the secret of secrets being secret. Secrets, it might be said, can ‘...announce their own existence’ (Paglen, 2009: 17). This is so not least because those with secrets often seek to advertise their possession.

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‘I don’t want to sound insulting, but on intelligence matters, there are those that know and those that speculate.’



These two quotes suggest some of the ways in which the deliberately withheld figures in the study of security and diplomatic communities. The upper comment speaks to the manner in which claims are made about the asymmetrical possession of knowledge. Offered at an international meeting of officials and policy analysts as a refutation to a presentation by an academic, the quote provides an example of the way it is proposed that the possession of certain types of said vital information demands

¹ The strategy of exemplifying was initially inspired by Mulkay (1985).

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some from others. When one party claims possession of knowledge that can not be shared with others, then this declaration figures as a ready-made block to possible counter arguments.

The lower extract of a redacted sentence of a Freedom of Information response indicates the deliberate efforts undertaken to withhold government information from outsiders. Especially in the areas of security and international relations, open government has its limits and can be seen to have its limits (see Gusterson, 1996). These restrictions mean that those outside of a select few that wish to take the measure of how officials assess security threats will struggle to do so. More widely than these examples, international diplomacy is often portrayed as an endeavor of somewhat doubtful candor wherein many things are left unsaid or encrypted.²

Secrecy though is not just a feature of these communities but it must be practiced in reporting about them because of disclosure rules. One of the most famous is called the ‘Chatham House Rule’. The 2002 updated version of it reads as follows:

When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.³

The rule enables those attending meetings, seminars, and workshops to repeat information heard. Yet, just what amounts to revealing identity is not clear from the rule itself. Would it be a violation of the rule to say the quote above on the left was given by an American? Presumably not, but what else could be stated might well be disputed. Yet despite this indeterminacy and the pervasiveness of this and other vague disclosure rules, I have almost no experience of uncertainties being raised about the meaning or scope of the Chatham House Rule.⁴ As another major source of concern, it is my experience that in attending ten events where this rule is stated, you are likely to hear ten different renditions of it.

Furthermore, within oral communications, I have experience of hearing attributed information from a Chatham House bounded meeting shared between participants to that meeting and non-participations. Yet, within written communication, in all my reading in the area of arms control-related literature, I can not recall a single attribution of a statement to a Chatham House Rule bounded meeting. While the rule is indeterminate, the practice is both permissive (in talk) and conservative (in writing).

With such conditions of negotiated disclosure, choices made about writing strategy take on some significance. The points in the previous paragraphs speak to the manner in which the practice doing ‘the ethnography of secrecy’ that will be discussed in this paper requires delving into complex relations of concealing and revealing. In seeking to make explicit the communication practices operating within

² See, for instance, Ritter (2005) and Barnes (1994).

³ <http://www.chathamhouse.org.uk/index.php?id=2>

⁴ At least where I did not initiate the grounds for doubt.

communities, this paper will outline strategies for ‘writing back’ to our organizational and professional audiences – the kind of strategies that might be especially relevant for those ethnographers working within industry context who often write for internal purposes.

With the goal of epitomizing the dynamics between those in the communities under study in the relation between author and reader, in the remainder of this section I want to ask how it is possible to productively topicalize the limits of what is included in social research accounts. As will be clear, the kind of practice for writing sought is one that uses the revelation of concealment to suggest the complexities of concealing and revealing prevalent in the communities in question.

WRITING SECRETS AND WRITING SELF

One mundane way that can be done is by actively highlighting what is left out of our stories through employing the blackening out of details often employed by government agencies. In this regard, Ellis (2007: 24) advised thinking ‘about ethical considerations before writing, but not to censure anything in the first draft to get the story as nuanced and truthful as possible.’ Yet, rather than then censuring through subsequent deletions difficult to detect by readers, another possibility is to write as we would like and then blacken out what is judged as impermissible. At the level of a face reading, this would have the advantage of making visible (at least some of) the erasures that take place in our reconstructions.

Yet, as suggested above, much latitude can exist in what to leave out of descriptions owing to vague disclosure rules. More generally though, it can be argued that disclosure rules and professional codes of conduct can not exhaustively speak to all eventualities. Testing the boundaries of how far the revelation of others’ identity can be taken could ride roughshod with confidences placed in us as professionals. Yet there is one person a researcher-author can experiment with regarding what counts as identification: himself or herself. Writing accounts of events with varyingly suggestive identifications of the author in the situations under study - through the use of redacted text and withholding of certain details - provides one way of foregrounding the contingencies of disclosure rules.

Consider these points and others in relation to the exchange below, recounted from international meeting regarding the nexus between advanced science and new weaponry:

‘How did you get rid of the threat of bioterrorism?’
 ‘I don’t know?’
 ‘Stop talking about it.’
 ‘But that would put you out of a job, wouldn’t it [REDACTED]?’

The blackening out in this case hides the name of the individual made the butt of the joke. Appearing on its own without any suggestion of who is party to the exchange, this form of telling represents one way of responding to the uncertainty about what is allowed by disclosure agreements. It is a matter of speculation for the reader whether the author is the joke teller, the responder, a listener, or the object of ridicule. Yet, such a cautious orientation is arguably not necessary. Whether,

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for instance, the official version of the Chatham House Rule allows individuals to identify their own talk seems disputable. Under a strict reading of the official version, the answer would appear to be ‘no’ because this would entail identifying a participant to a meeting. Without this identification, though, it would never be possible to repeat what one directly heard. In response to such uncertainty, an approach I have adopted is to offer varyingly suggestive identifications of myself.

Adopting such a playful orientation can not only be used to flag the contingencies of what is included in research accounts, but also the implications of telling secrets. Both within social interactions as well as in the relation between researchers and their readers, the revealing of otherwise hidden information has implications for how the teller is understood. Like confessions, in general, revelations invite the reader into a moral relation with the teller, one centered on sharing what is off limits to others (see Rodriguez and Ryave, 1992). The indication of access to what is typically off limits provides a basis for setting apart the secret teller (see Gunn, 2005). At least some (albeit engineered) hesitation could minimize the most problematic hazards associated with the suggestion we as researchers are ‘storying our secrets into the light’ (Poulos, 2008: 53).

Especially when we position ourselves as co-participants in events rather than as mere observers of them, then a playful orientation to author identity in our write-ups can help acknowledge the varying interpretations given of us in our fieldwork interactions. Speaking about highly participatory forms of research, Greenwood (2002: 118) commented that ‘there will be times when it can be difficult for the [researcher] and his/her collaborators to have the necessary awareness of the different roles and their implications at a given time in a project. This is due to the inherent complexity [of such roles,] where the researcher should, and shall, move between closeness and distance, participator and spectator, learner and teacher.’ The messiness of our place as investigators means that we often do not have anything like a rounded grasp of how we are seen by others. With this basic difficulty come questions about how we present ourselves and others in our writing. If autoethnography is to go beyond the goal of communicating situated actions, but instead to also critique ourselves as situated actors (as recommended in Spry, 2001), then it is necessary to explore ways of acknowledging and working with our uncertain and negotiated status.

WRITING SECRETS AND WRITING THE WORLD

Disclosure limits have more than ethical dimensions, but also *representational* ones. For instance, as Walford (2002) argued that questionable generalizations that prove resistant to challenge can be advanced under the banner of protecting actors’ identities. Nespor (2002: 550) likewise spoke to this point in contending that:

Giving people or places pseudonyms and strategically deleting identifying information turns them into usable examples or illustrations of generalizing theoretical categories...in which form they stand in for social classes, ethnic groups, genders, institutions, or other theoretical constructs.

In this way, the findings of research are constituted as ‘movable, replicable, and citable’. As such, they can then be added to the general knowledge in the social sciences.

After recognizing the potential for what is left out to bolster what is taken as in them, an issue is where to go from there. For instance, in relation to concerns about the link between anonymization and the formation of questionable generalizations, Walford (2002), recommended choosing research sites because of their uniqueness rather than their supposed generalizability.

A different way forward in line with the drive of this article is to topicalize the missing. For instance, when it is not clear what can be reported from a meeting because of the vague and indeterminate disclosure arrangements in place, one technique is to offer upshot glosses of the understood implications and import of the event. If we as researchers ‘can not’ give detailed descriptions, it is possible to advance our evaluations of the significance of events. Another technique is to systematically detail what preceded and followed an event, but to noticeably delete it from our accounts. Both techniques draw attention to the missing elements of our stories.

As a somewhat narrow purpose, telling stories in such ways parallels the interactional dynamics at play in secrecy laden communities. Herein, researchers often hear upshot glosses and must piece together what happened at certain events that could not be attended.

As a wider purpose, techniques highlighting what is absent from our accounts can speak to the manner in which readers of text are generally making connections, drawing inferences, and speculating in relation to what is missing. Writing as a reduction of experience to words requires active participation by the reader. As Iser (2002: 293) argued, in reading a text the reader is ‘drawn into the events and made to supply what is meant from what is not said. What is said only appears to take on significance as a reference to what is not said; it is the implications and not the statements that give shape and weight to the meaning.’ The overt blanking of material from social analysis can help promote active and aware attention to the reconstruction of events. In doing so, with the strategic use of the missing comes the possibility of encouraging consideration by readers about what constitutes appropriate action in social research and social life (see Barone 1990).

It is not just possible to bring to the fore the manner researchers and readers must work to piece together meaning from inevitably partial accounts, but to question how this gets done. For instance, in relation to the matters of security in this article, government Freedom of Information provisions at least offer the possibility of challenging the claims of actors as well as allowing researchers to report on events that would otherwise be off limits. Introducing materials gathered from requests after the initial portrayal of the events in question provides one way to reconsider how events are initially interpreted by readers. With the often glaring redactions from official accounts and their usually obscure text, the bounds on the information received as part of such requests can set the basis for a further consideration of what is being revealed and concealed through Freedom of Information ‘disclosures’.

WRITING SECRETS AND WRITING INTERACTIONS

As another dimension of handling absences, social researchers partaking in worlds infused with secrecy need to consider its implications for social interaction. As has been argued elsewhere, the deliberate concealment of information should not simply be understood as a barrier to interactions, but

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consequential within them (Rappert 2007). As Masco (2001, 451) argued in a study of US national defence labs, secrecy is:

wildly productive: it creates not only hierarchies of power and repression, but also unpredictable social effects, including new kinds of desire, fantasy, paranoia, and - above all - gossip.

And certainly during the events that the author has participated in, rumour and gossip have abounded as individuals try to take the measure of what has happened and speculate on what is to come in settings characterized by shifting front and back regions. In the informal banter, much conjecture has been evident about what entities such as ‘George Bush’, ‘Iran’, or ‘the security community’ really think as well as the underlying motivations for statements and actions.

Informal side discussions - whether at the level of speculative rumour or seemingly more informed assessment - serve what is routinely acknowledged as an important facet of the sorts of meetings I attended. Indeed, providing time for face-to-face dialogue is often a central justification for organizing many events. Yet, I can not recall a single publication by an arms control or security studies analyst where statements have been attributed to such conversational settings. In my experience, rule indeterminacy about exactly what can be recounted is associated with conservatism in writing. I do have recollections though of statements from disclosure agreement bounded events being repeated as part of oral conversations at subsequent events.

So, how might it be possible to give a sense of participating in ‘secret talk’ while also respecting the (albeit vague) disclosure arrangements in place?

One way is to present snippets of conversational exchanges taken from a meeting but without any supplementary information about the speakers (for examples of this see the ‘On the Circuit’ chapters in Rappert [2009]). Yet this might not be deemed to go far enough. If those statements related to themes brought up by a particular speaker at a meeting, then others present to the meeting as a whole (but not the side conversation) might be able identify the speaker. A way to remove the prospects of such secondary identification would be to jumble together statements taken from different events. A short rendition of these mixed snippets is as follows:

‘We all know why
we are in the
situation we are in.’

‘I am just saying that what people say in closed sessions is not what they say in the open one. No state said anything about fear of science being shut down in the closed sessions. Did you notice it was not in the final report?’

‘How on Earth did you get the idea that we did the IL-4

experiment on monkeypox?

‘Some who would be in a position to know told me.’

‘Who?’

‘Well I can not say. I remember it quite clearly, as he was reaching for a croissant.’

‘So the foxes are in charge of the coup now?’

‘Haven’t they always been.’

‘I am not like most scientists, I don’t close my eyes to what happens in this country. Like my parents that didn’t want to ask questions before the war. Nice people, but they avoided asking questions when their neighbors disappeared. I don’t want to be like that, I want to ask questions.’

‘We joked about it as one code to rule them all.’

‘All of this talk about bioterrorism, it’s all about fear.’

The result of such contortions and precautions is a stilted jumble that hides as it disclosures; an assortment of text that is at once expectant with and bereft of meaning. Any number of associations might be made between a single statement and others or between statements and individuals. And yet, any such attributions would have a dubious validity. Motivations, patterns and origins might well be attributed in a manner that reinforces existing beliefs.

Such a representational form though would have advantages of suggesting to a reader what it can be like operating in security and diplomatic settings. For instance, the extremes of truncation and abstraction speak to the hesitations that can be associated with attempts to understand situated talk. Fleeting conversations between diverse individuals discussing complex issues through employing varied professional vocabularies infused by acts of concealment often require inferential leaps. They are often liable to foster poorly justified conclusions too.

It is possible to move beyond simply noting the manner in which the desire to keep hidden affects what can be reported. One way of doing this is to consider how researchers as actors orientate to and write about uncertainties and unknowns. Especially when researchers acknowledge themselves as active participants in the situations depicted, rather than notionally being mere observers of them, then we must make decisions about how to act and represent our action. Action though is always undertaken in conditions of ‘bounded rationality’ (as in Simon, 1982), wherein we are limited in what we know and our capacity to deal with this information.

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Certainly working in an emerging security policy area through a disciplinary set of preoccupations, the limits on understanding are many. Knowing how to go on in such settings as a researcher can be rather challenging. For me, where the international deliberation about codes of conduct was headed and what it amounted to were the topics I was trying to figure out in the past and ones I am still wrestling with today. Attempting to gauge the commitments to and intentions behind others’ actions were matters of some difficulty, especially given the circumspectness of many interactions.

As a result, it would be rather problematic to give a story that did not accord central place to the importance of the missing from researchers’ accounts. As part of this, what is needed is not only to note various ‘blind spots’ associated with our understanding from one point in time. This would hazard providing a flat account that abstracts utterances and actions from the contexts that make them meaningful and the contexts that they make meaningful (Wieder, 1974). Instead, what is needed is an account that asks how the missing figures in the sequential unfolding of our understanding of events.

In doing this, it is possible to disturb the sense of meaning making between patterns and instances over time. So, as explicated through ethnomethodology, meaning is often accorded to actions or statements by seeing them as expressions of a pattern; such as a pattern of motivations or identity. Yet, this pattern is itself formed from the instances (Garfinkel, 1994). In other words, a sense of pattern is both constituted by and constituting of the individual instances. Yet for me, this mutual constitution still remains unsettled and poorly formed in important respects. In no small part, this is due to the information restrictions in play within security and diplomatic communities. These restrictions make relevant distinctions between front and back region impression management, raise doubts about the candor of talk, and underscore the role of trust in social interactions.

The limitations of identification of individuals in our writing might be quite productive. So, if an account contains various expressions, but not information about who said them, readers might be perceiving patterns, but not be sure if they were justified patterns or exactly what they were patterns of. Contradictory statements being made that appeared related in some indefinite way to a group or setting would likewise raise questions of interpretation.

This (selective) problematizing of meaning making then can speak to the doubts that can be associated with social analysts’ - and others’ - attempts to understand what is going on in settings infused with secrecy. What is being suggested here then is to have readers to struggle to figure out the ‘big picture’ because this was and is my experience. The gaps crafted are meant to speak to the gaps in my understanding of what is going on and my place in it.

DISCUSSION

By considering the complexity of disclosure associated with undertaking research in security settings where secrets are rife, this paper has sought to set out a novel approach to writing up the ethnography of secrecy. That is through adopting writing strategies that entail concealment as a means for revelation - albeit a certain exemplary kind of revelation.

In acknowledging how the fashioned revelation and concealment is a feature of our accounts (rather than just being a dynamic of the settings under study), I have wished to avoid treating the telling of secrets in qualitative studies as straightforward and innocent. As well, instead of deeming secrets to be unfortunate absences or obligatory precautions, I have wished to ask how they could be appropriated in a practice of telling (as in Bratich, 2007). One of the things sought through the engagement with secrecy here was to demystify the allure that so often accompanies its discussion. Rather than the mere exposure of hidden information, we sought to place on the table for consideration the pervasive aspects of secret keeping - this even in the analysis of secret keeping.

More though, rather than just acknowledging how it entailed secret keeping, this chapter has sought to turn incompleteness into an analytical resource. With its play of revelation and concealment, the conversational writing format is meant to epitomize the negotiation of revelation and concealment prevalent in international diplomacy. An experimental form of writing has been taken to convey an experiential appreciation 'what it was like' to undertake inquiry in conditions of partial disclosure (see Sparkes, 2000). That has meant highlighting the tensions, uncertainties, and contradictions associated with knowing and conveying matters that cannot be wholly known or conveyed.

An underlying premise of this presentation has been that in examining issues where question marks exist about candour and openness, an account that does show this should beg questions about how it was seamed together. An analysis that smoothes out such roughness denies the conditions under which it takes place and presumably many of the reasons why it takes place. Attending to place of what is absent is one way to try to convey 'feelings, ambiguities, temporal sequences, blurred experiences, and [to] find a textual place for ourselves, our doubts and our uncertainties' (Richardson, 2000: 11). Considering the parallels and interconnections between the place of secrecy and absences in our research narratives and those we observe in the communities we study is one way for researchers-as-authors to try to 'hold themselves accountable to the standards of knowing and telling of the people they have studied' (*ibid.*: 15). More though, it can be part of trying to understand how accountability is accomplished as a practical activity by those people. In contrast, the lack of attention to how exposures are carried out and their implications for accounts could lead to the establishment of new forms of unacknowledged conventions.

Yet the sorts of visible and engineered absences proposed above pose concerns about manipulation similar to those associated with the partial revelations of any other story. In purporting to attend to what is missing, while necessarily only being able to do so in a limited fashion, the types of writing techniques suggested in this article could be associated with significant dangers about their selectivity. Indeed, the writing about those writing strategies is itself questionable in relation to concerns about manipulation. In providing only certain (limited) details and elaborations, this article could be questioned in relation to how it raises parallel types of concerns about how the missing figured into the arguments. In other words, in its use of absences, this article exemplifies aspects of the writing strategies advocated for addressing absences. As a result, the scope for concern for how absences figure in social analysis is considerable.

It has not been my intention to offer an escape from the many problems associated with conveying experience. Rather the intent has been to think about ways of writing that sensitize us as

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researchers to how secrets figure within social relations, that speak to our lived experiences in situations of managed disclosure, and that alert us as to how secrets help secure our claims to knowledge. In acknowledgement of the demands of secrecy, this presentation has asked how investigators can fashion alternative possibilities for knowing.

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The Way to Design Ethnography for Public Service: Barriers and Approaches in Japanese Local Government

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This paper introduces various barriers hindering the introduction of ethnography in support of public service design improvement in Japan, and discusses ways to overcome these barriers. Service design approaches using ethnography are gaining popularity in the public sector, especially in Europe. In Japan, however, local governments have adopted few or no ethnographic methods in order to improve public services. One of the most difficult barriers to the establishment of ethnographic approaches in Japan is the long-lasting relationships between citizens and local governments. Ethnographers engage in competition with citizens and are accused of bias, making it difficult for local governments to conduct ethnographic research freely and understand their citizens in depth. In order to overcome these barriers, this paper proposes three approaches about introducing areas, research protocols and organizations.

INTRODUCTION

Today, ethnographic approaches in the service industry are prevalent in countries like the UK and Denmark. In the UK, leading strategic design firms regard the service industry as a growth field in both the private and public service areas. The UK Design Council (2008)¹ also focuses on service design as one of the most important contributions of the design approach. Along with this movement, national UK agencies such as NHS and IDeA are now investing heavily in human service innovation and promoting public service design (e.g., Carthey 2003; IDeA, 2009). In Denmark, human-centered design is considered to be a strategic driver, and many social issues are being targeted with ethnographic themes by small to mid-sized design firms, including both government-funded and private company projects (Wise et al., 2008; Bisgaard et al., 2010). This suggests that the governments of these countries consider the service industry to be strategically important.

Ethnographic methods are getting more and more attention in the public service sector as a way to enrich and improve people's daily lives. In Japan, the market size of public service is also large—according to the Nomura Research Institute (2008), the potential scale is 5.4 trillion yen, large enough to establish public service design as a national industry. However, public service design in Japan has not attracted attention as a potential industry. This paper identifies the barriers standing in the way of widespread adoption of public service design using ethnographic approaches in Japan.

¹ The UK Design Council (2008) lists the examples of public service innovation by service design approach. In some of those cases, ethnographic approaches are used and make a contribution to the innovations.

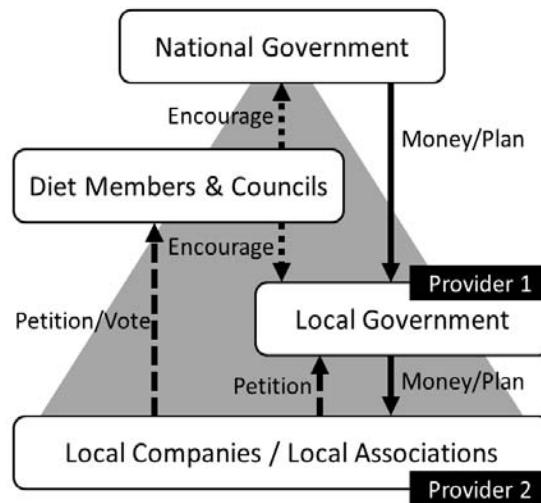
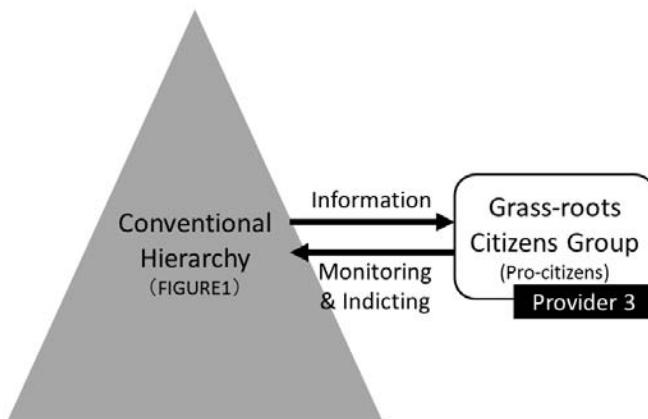
THE UNIQUE STRUCTURE OF PUBLIC SERVICES IN JAPAN

In order to explain why ethnography for public service design has not gained widespread acceptance in Japan, I first discuss the unique relationship between the local government as a public service provider and citizens as recipients in Japan.

In the Japanese public service domain, local governments (provider 1) are invested bodies of the national government; local companies and associations (provider 2) commissioned by local governments have traditionally been the major provider of public services such as social welfare and public facilities. Most of the time, commissioned companies and associations are authorities of the local community. Historically, they therefore have strong connections with Diet members and councils. Companies and associations use these connections as lobbying opportunities to realize their own goals. In return, local associations collect votes for their councils and Diet members, resulting in win-win partnerships. The product of these relationships is a hierarchical structure with national government at the top and local companies at the bottom (see Figure 1). This hierarchy is the closed structure of influence-padding.

This is different from the situation seen in the US, in which the roles of private companies are emphasized. The situation in Japan is different also from that in Nordic countries, where the government provides public services directly as a government organization. Japan also differs from European countries, which place a strong value on the self-sustained activities of citizens on both economical and practical levels, as evidenced by the conditioned community fund system (Kato, 1998; Daly, 2003). Compared to other developed countries, the structure of public services in Japan reflects the hierarchical socio-cultural structure called the “Mura society” (an informal and exclusive community-based society).

Within the Japanese hierachal structure, there is another unique actor—professional citizens (provider 3; see Figure 2). With development of the hierarchy, grassroots activities also emerged in order to monitor and indict the structure of influence-padding. Pro-citizens’ groups gradually became well-equipped, established connections with local government and gained attention in the public sector. Since they have richer knowledge and closer relations than general ordinary experts, members of these groups have been called “professional citizens”. Although local associations and professional citizens (provider 2-3) have played important roles in providing and improving public services for a long time, difficulties have emerged in meeting the complex needs of citizens under the conventional hierarchical structure, as an aging organization and inflexible structure are sometimes unable to adapt to changing social needs.

FIGURE 1. *Conventional Hierarchy for Public Service*FIGURE 2. *Relationship of Grassroots Citizens' Group to the Conventional Hierarchy*

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As a solution to this problem, former Prime Minister Yukio Hatoyama proposed a new concept called “New Publicness²”, which is now coming under the spotlight. This concept calls for the expansion of public service providers. The current Japanese government is attempting to expand the provision of public services not only to local governments and commissioned local companies but also to new NPOs, citizen groups and private companies (provider 4). The government aims to change the role of citizens from mere public service recipients to both recipients and providers in order to enhance citizens’ consciousness of their daily and social activities, generate new ideas for improvement and provide higher-quality public services. However, there is little financial and methodological support for this concept at the moment.

Current Public Service Structure

Although the Japanese government has attempted to promote “New Publicness,” it has been difficult to realize a smooth transition from the old structure, because local associations and pro-citizens’ groups (providers 2 and 3, respectively) remain strongly rooted in the “Old Publicness” structure for providing public service. In addition, most new NPOs are immature both economically and organizationally.

This situation indicates that ethnographers of the public service domain can potentially partner with four different types of stakeholder (providers 1-4): 1) local governments, providing local public services in a traditional manner; 2) local companies and associations, connecting with councils and Diet members and entrusted by the local government; 3) professional citizens (grass-roots citizens group), monitoring local associations and challenges to provide better services; and 4) NPOs (new citizens group), expected to be the major actor of “New Publicness.”

Undeniably, these conventional providers have made substantial efforts to improve public services. However, there are factors preventing providers from improving public services. For instance, local governments lack adequate finances and manpower, and both local associations and pro-citizens’ groups are sometimes unable to respond to changing requirements in a timely manner. As a result, there are gaps in understanding between service providers and receivers in terms of generation and lifestyle needs. On the other hand, new NPOs are usually immature and financially unstable and their operations are still in the early stages.

Because the situations of each of the four types of actors are different, it is necessary to develop ideas about how ethnographers can efficiently support the transition phase.

² “New Publicness” is a literal translation. “Public service structure revolution” or “Public service provider expansion” may represent more precise translations.

APPLYING ETHNOGRAPHY TO JAPANESE PUBLIC SERVICE DESIGN

Research Project

This ethnographic research project was conducted to identify new opportunities for child care support services provided by a local government for mothers with children aged 0 to 2 years old. I have been engaged in this project as a part-time researcher at a city local government for 2 years. I have conducted longitudinal observations and informal, semi-formal interviews in a local support center used as a local mother's third place (Oldenburg, 1989) and informal counseling center. In the course of conducting this study, aside from the main research issues, I have faced the structural barriers encountered by ethnographers in the Japanese public service structure. In this paper, I will discuss the structural hardships of conducting ethnography in public service in Japan.

Key Findings

1. *Positioning of ethnographers and power balance among service providers*

In the city where I conducted ethnography, there are multiple support centers with different administrative backgrounds, such as centers managed by the city, those commissioned by local associations, and those driven by NPOs. I first approached a city-managed support center considering my research theme, the center's operational condition, and accessibility as a city-hired researcher. However, the staff strongly advised me also to conduct research in a local association-managed child care center with showing the shadow of accusation from the local associations. One staff member told me that the association-managed center has specialized expertise, is well operated and gives a lot of good advice. As it was rare for staff members to give me advice, I assumed that the advice had a hidden aim and tried to listen carefully. It appeared that there were complex relationships between the city government and local associations. Technically, as the city government commissions the association, the status of the government should be higher than that of the association. However, when it comes to the professional expertise within the field, the actual relationship was reversed. This shows that in the course of long-term relationships, there was a power dynamism among the centers; in this case, the association and its staff were important stakeholders in the community. As a local government-hired ethnographer, it is difficult to miss the fact that the power balance among the child care centers is important. Considering end suggestion from ethnographers toward local governments and all the other stakeholders, including the city, local associations, NPOs and citizens, although the research goal has met with one specific stakeholder's field, we need to design the field in consideration of the complex power balance between each stakeholder.

2. *Selection of interview participants*

The selection of interview participants was another difficult point that I faced. In this study, including 2 years of observation in the local government-managed care center, I have conducted in-depth interviews with mothers as users of the center. When I reported and proposed new service opportunities and ideas based on the findings of the study, one of the local city staff's primary concerns was the representativeness of the participants—how far the outcome could be generalized.

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No matter to what extent the findings match with the staff’s experiences and seem reasonable, a sense of fairness, which the representativeness of informants generates, is required in order to establish a consensus among internal stakeholders and citizens. This is because, in the local city government, the decision-making staff members are not necessarily experts on the study subject—in this case, child care—and they are not able to cooperate during the research process. In order to make decisions, the local government staff assumes that fairness is essential for citizens’ satisfaction.

3. Prioritization of “citizens’ voices”

The last barrier I faced in this study was the prioritization of citizens’ direct voices over citizens’ voices expressed through ethnographers. In the city government office, citizens are always able to express their opinions about public services both directly and through local associations. In contrast, the insights and stories collected by ethnographers are assumed to be an edited version of the citizens’ true feelings, and are thus given a low priority by the local government as compared to citizens’ direct voices. To make the most of ethnographic approaches in the public sector, we need to differentiate the value of ethnographic insights from citizens’ voices.

DISCUSSION

In this research project, I have faced three barriers in applying an ethnographic approach to the design of public services in Japan. Here, I would like to discuss further issues and triggers and how ethnographers can be effectively introduced into the public service domain in Japan.

1. Barriers to applying ethnography in Japanese public service design

For ethnographers, it is essential to immerse oneself in the research field and find an appropriate place to observe. Therefore, ethnographers are meant to be sensitive to and understand the power relationships in each field. By considering human relationships and power dynamism in the field, ethnographers are able to flexibly change their position in the field in order to obtain deeper access and understanding of the study object. In this context, the Japanese public service domain is challenging area in which to conduct fieldwork, because it includes a number of diverse actors with very complex implicit relationships. Formal explicit hierarchies are sometimes different from actual hierarchies.

As noted above, a key finding of this study was that the position of an ethnographer working in the Japanese public sector is affected by a complicated power balance and dynamism among actors. Local authorities (provider 2) and professional citizens (provider 3), who have carried out public services in Japan until now, are assumed to be “experts” in their respective areas—no other actors are expected to have any further knowledge on that specific area of the district in question.

In addition, Japanese local governments tend to give an important role to generalists. As a result, local government personnel are frequently being reshuffled. Though this system cultivates many generalists in the public sector, few staff members acquire rooted skills in a specific area. This system has enhanced the expertise of local associations, who have committed to the work longer than local

governments. As special continuous knowledge cannot be accumulated within the local government, local associations gain stronger influences over their domain.

For local associations, ethnographers aiming to obtain deep understanding of their domain are newcomers that threaten their expertise and prior status. For people who have built their status upon the system, ethnographers are unwelcome.

In this sense, as an outsider or newcomer, the same things could be said for the new NPOs spearheading the idea of “New Publicness”. As mentioned above, in many cases, the financial and social bases of these new NPOs are still weak, and they are mostly supported by the motivation and hard work of volunteers. Under such circumstances, NPOs tend to be very sensitive to new ideas and outsiders such as ethnographers, who have different visions and ways of thinking.

Building relationships with other actors is very important for ethnographers; however, this process can be quite difficult in the Japanese public sector, especially as compared with business and academia. Ethnographers can easily become targets of criticism from the community, and they must be prepared to face this criticism, as well as to put in the time and effort required to earn their place in the field in the eyes of community members.

2. Lack of representativeness among informants

By definition, ethnography places heavy emphasis on concrete individual stories. Therefore, as long as an ethnographer understands the respondent's identity and context, representativeness should not be a problem. However, in Japanese public service design, in addition to the research methodological standpoint, representativeness emerges as a key problem, as mentioned earlier.

Arguments in the context of representativeness take two forms: one from the citizens' point of view and another from the government's point of view.

From the citizens' point of view, unless citizens understand the research approach and trust the ethnographer, they perceive a lack of representativeness to be a negative influence of the government. Conventional pro-citizens' groups (provider 3) are particularly sensitive to the fairness of governments and public sectors.

Thus, if an ethnographer belongs to a local government or public sector, citizens tend to accuse that the ethnographer intentionally chose informants who will say what the government wants in order to support local government measures and defend the established interests of local associations (provider 2). The lack of representativeness of informants makes citizens evoke political implications.

On the other hand, representativeness is a significant issue in government operation, especially when it comes to consensus making. One of the characteristics of government organization is a vertically segmented hierarchical administration—it is rare for decision-making managers to learn about grounded services or participate in the research or analysis process. Hence, government decision makers reach a conclusion based only on the final output with little empirical understanding. In this

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regard, since they are focusing not only on the child care domain but also on other public services, such as elderly care, education, and the development of infrastructure and industry, they tend to care about the balance among services. As a result, they tend to make decisions based on the general service content guaranteed by certain research methodologies rather than the relevance of the content based on in-depth field research. In this manner, the government experiences difficulty in strategic decision-making as compared to private corporations.

As mentioned above, it is important to maintain the representativeness of the research output when the government tries to make the most of the output for policy planning. However, no single informant can represent all citizens, and it is difficult to select an adequate number of informants in order to obtain representativeness. Furthermore, representativeness does not always deliver a rich ethnographic outcome—even if we demonstrate the representativeness of the data, we cannot necessarily extract insights for the improvement of public service design, as previous works have indicated.

The stronger the focus on a sense of fairness, the more the legitimacy of the ethnographic approach in public service design deteriorates socially and organizationally. In this circumstance, ethnographers have little choice but to respect the long experience and authority of conventional local associations and citizens' groups (providers 2 and 3) rather than giving priority to their own ethnographic expertise. In order to utilize ethnographic findings/outcome and extend them to more areas of society, public ethnographers must obtain citizens' trust as fair researchers and facilitate consensus building among stakeholders and citizens, particularly regarding the selection of participants.

3. Conflicting values between volunteer work and silent voices

The issues surrounding “silent voices” are attributed to the fact that volunteer work should be respected and valued in a democratic society. Local associations, demanding pro-citizens' groups and NPOs (provider 2-4) mentioned above are voluntarily acting for the improvement of their society. Our democratic society respects and esteems a volunteer spirit from its citizens. On the other hand, another important aspect of ethnographic approaches—to speak for those not willing or able to act voluntarily—has been partly disregarded. Though ethnographers have attempted to shed light on these “silent voices”, there is little understanding and support for ethnographic approaches as compared to the proactive activities of citizens. If local governments had enough economic and human resources to invest in the ethnographic work necessary to bring forward all the silent voices related to the improvement of social services, there would not be a problem; however, under today's circumstances, local governments have no choice but to give priority to visible voluntarily activities. Again, this is due to the unique Japanese public service structure in which citizens can be both service providers and service receivers, including ordinary citizens with or without active voices. In this context of conflict between the voices of citizens and ethnographers (see Figure 3), the respect for the value of volunteer spirit and autonomy represents one of the most difficult barriers faced by ethnographers in Japan.

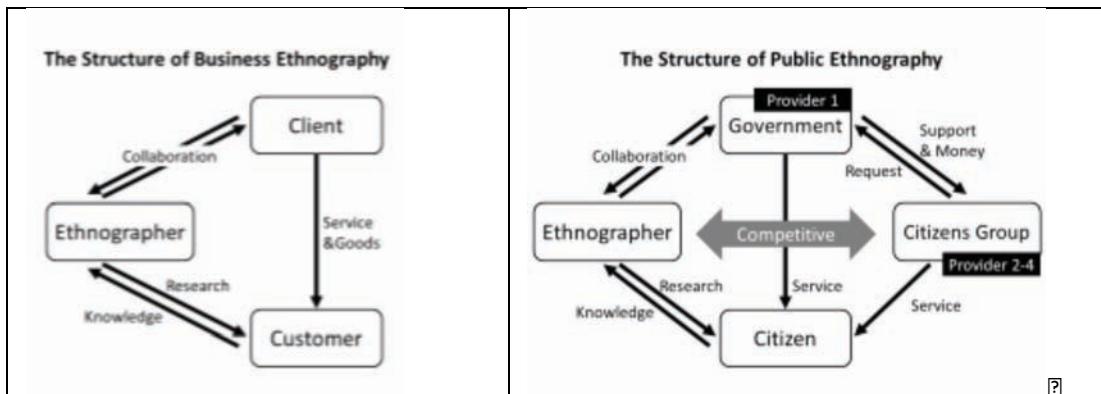


FIGURE 3. Structures of Business and Public Ethnography

This can be further argued with the concept of “real lives” discussed by Nufus and Anderson (2006). The framework in which ethnographers describe the “real lives” of consumers through fieldwork delivered value to the industry and became a starting point for the application of ethnographic approaches. However, “silent” consumer voices are “ghosts” or “specters” in this scheme. In order to challenge further development on ethnographic work, Nufus and Anderson argue that there are so much more to offer our audiences and potential audiences.

Within this argument, even if ethnographers attempt to identify “silent voices” in contrast to conventional actors such as pro-citizens’ groups (providers 2 through 4) as “active voices”, it is difficult to gain acceptance. This is because the citizens’ voices delivered from conventional actors are politically value authorized as active or “real” voices. Ethnographers working in the Japanese public sector must overcome the “Real People Period” paradigm that emphasizes people’s “real lives” in the course of the research process.

COUNTERMEASURES FOR BARRIERS TO ETHNOGRAPHIC APPROACHES TOWARD PUBLIC SERVICE DESIGN

As mentioned above (Discussion 1-3), the complex relationship between the government and citizens represents a difficult barrier to the application of ethnographic approaches to public service design in Japan. In order to overcome this problem, I introduce three possible approaches.

1. Introducing ethnography to areas which conventional organizations cannot address or represent directly

Citizens’ organizations (providers 2-4), for instance, cannot touch the inner affairs of local government, such as service reception desks or administrative work of organizations. The barriers to public ethnography can be lessened by introducing ethnographic approaches to the inner affairs of local governments, bypassing the complex relationships among other actors (Akashi 2002). Introducing

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ethnography to disaster planning is also effective (Hayashi, 2009). In these areas, ethnographers do not face competition with conventional organizations, as most people have no experience of falling and helping disaster victims.

Applying ethnography in these areas is effective in obtaining value in the eyes of the public and introducing the benefits of ethnographic approaches to public service stakeholders. However, this does not solve a number of essential structural problems.

To solve these problems, the role of local governments as public service providers must be changed to leading public service developers. Even when resources are limited, if governments can focus on their resources and field to develop services and export and transfer knowledge, the structure for providing public service is simplified, making it easier for ethnographers to establish partnerships with local governments.

2. Maintain the representativeness of informants and stress consensus building among citizens

In city planning, methods such as “Deliberative Polling³” and “World Café⁴” are getting more popular in Japan. The appeal of these methods is that the results and the process seem to have an adequate level of representativeness, both logically and emotionally. These methods, however, place too much stress on representativeness and consensus building. In addition, active citizens tend to have much stress not to say their ideas freely, as the fixed workshop format of these methods, designed to build consensus among many citizens, does not leave much room for change.

In these approaches, it seems that city planners have placed too much emphasis on discussions of the fundamental principles of democracy, neglecting to include organic grassroots movements. In contrast, ethnographic human-centered approaches and tools such as documentations of daily life, diary keeping, role playing, visual recording and picture collages provide opportunities for citizens to casually participate in the process of service design and innovation.

Though building a consensus among a large number of people remains a challenge for ethnographic approaches, WEB community and IT tools have shown potential in observing the daily lives of users while at the same time producing insights for service design and helping citizens to reach a consensus (Amagasa, 2008).

³ Deliberative Polling was proposed by James S. Fishkin and now is promoted by the Center for Deliberative Democracy (<http://cdd.stanford.edu/>). It aims to maintain representativeness through random sampling, promote constructive discussion and establish a consensus via a set of rules (Fishken, 2009).

⁴ World Café is a workshop proposed by Juanita Brown and David Isaacs in 1995 in which participants’ visualization of ideas and frequent seat changes engender a sense of common emotional understanding (Brown and Isaacs, 2005).

3. Changing relationships to conventional local organizations

As mentioned in Discussion 2-3, ethnographers hired by the local government may experience conflict with citizens' organizations. As a result, ethnographers often side with citizens' organizations that have proactive voices. However, citizens' organizations usually lack the financial and human resources necessary to collaborate with ethnographers.

One idea for solving this problem is selecting research informants from among the members of citizens' organizations and allowing their active interests to pour into the ethnographic research activity. It also is effective to build long-term trusted relationships as research partners and let citizens' organizations become involved in the ethnographic research project.

More directly, local governments could change the support system for citizens' organizations from financial support to human resources support. For example, governments could support citizens' organizations through a personnel exchange program. Ethnographers sent to citizens' organizations can introduce the ethnographic approach to the members as a means of innovation. This would help citizens' organizations to conduct ethnographic research and generate new insights from citizens, reinforcing the basics of their sustainable service platform to provide better services through citizens' own effort.

Developing processes and tool kits that make citizens more accessible to the ethnographic methods is another possible approach. Ethnographic approaches are effective as research methods that allow citizens' organizations to find opportunities by themselves. In terms of preparation and return on the investment, ethnographic approaches are cost efficient compared to large quantitative surveys. Making ethnography accessible to local public service actors is an urgent task for local governments.

TABLE 1. Approaches to overcoming the barriers through assumed partners

Partner	Actual condition / Problem	Approaches
Provider 1: Local Government	Shortage of financial and human resources / Restrict of fairness	Introduce ethnography to inner area of local government / Change the role from the receiver to the service innovator
Provider 2,3: Local Associations & Pro-Citizens (Grass-rooted Citizens Groups)	Not adjusting to today's change (lack of understanding the receiver of their service) / Sensitive to their authority.	Send ethnographer to them as low cost professionals from government or the third party like universities/ Build the relationship of trust through long term research on them / Developing the research methods with using various media and IT tools
Provider 4: New Citizens' Groups (e.g. NPOs et, al.)	Shortage of financial and human resources / Sensitive to their own position and new ideas.	Same as above and Advance people to people exchange / Through the exchange nurturing ethnographers in NPOs.

Table 1 summarizes the actual conditions, problems and approaches for the barriers hindering the establishment of ethnographic approaches by listing the potential partners of ethnographers in public service design. For new NPOs that are continuing to grow, methods of promotion, such as people to people exchange, seem efficient.

CONCLUDING REMARKS

Due to the unique structure of public services in Japan, the concepts put forth in this paper do not necessarily apply to the situations in other countries. Nevertheless, an organizational view, as pointed out above, is important for ethnographic praxis, especially in the anti-individualistic culture of organizations in East Asia. Taking into consideration the differences among applied fields, areas and cultures, we must determine appropriate ways to design ethnography for public service.

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The Dō and Jutsu of Strategic Ethnography: Balancing the way and the art of understanding

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In Japan, martial arts emerged from a long period of violence. Once warring ceased, philosophical practices formed on this foundation of efficacy. These martial arts are called by names ending in –jutsu (“technique”) and –dō (“way”), respectively. From ethnography’s rich tradition of understanding grew the practical art of understanding as a means to an end. But strip portions of the practice from the way, and problems sprout. For social research to remain relevant, practitioners must strive to embody the essential spirit of ethnography - understanding people. In the martial arts, Dō and Jutsu practiced by masters are identical. In the field of design research, we similarly balance understanding and application to deliver strategic outcomes. However, external factors push this practice to become more predictable and thereby threaten the balance. Using the analogy of Dō and Jutsu in the martial arts, we explore the challenges that strategic ethnography faces today.

INTRODUCTION

This is a watershed moment for design research, for design strategy, and for ethnography. As a community of practice, we’ve recently experienced great success and have been able to change, to some extent, how humanity as whole addresses problems. But what’s next for us? In recent discourse among practitioners, there seems to be an air of unease- how do we define what we do? More importantly, how do we do it better?

To this end, we have set out to define the *Way* of ethnography. However, the *Way* of ethnography has a hidden corollary- the *Art* of ethnography. The interplay between these aspects of mastery is our focus, discussed using the concepts of *Dō* and *Jutsu* as embodied by classical Japanese martial arts. Loosely interpreted, *Dō* is the way of a particular practice and *Jutsu* is the set techniques used in that practice. The history, philosophy and practice of martial arts provides a useful lens for understanding what we do and illuminates some of the challenges our field faces today.

The term ethnography has come to mean a wide variety of things, and is basically synonymous with any qualitative research that’s not a focus group. Generally, it implies deeper, more open-ended research techniques, which should take place in the context of the subject’s environment. However, as qualitative research is becoming a *de rigueur* part of basic marketing practice, these distinctions are becoming less and less meaningful. We, the authors of this paper, are not anthropologists. We are design researchers. We are strategists. We are a hybrid breed practicing a craft that is as old and fundamental as it is new and undefined. Our techniques, philosophies and perspectives are based on

many different applied and academic theories, but to be sure they have been honed in the field of practice. This analysis is intended not as an academic work, but as a means of initiating dialogue.

As the international community of researchers, we use ethnography as a means to an end and increasingly, we are being asked to focus on the ends to the point where our processes may start to break down. Researchers are trying to get just as deep in half the time, or maybe 75% as deep in 25% of the time. To paraphrase Patrick Whitney and Vijay Kumar, the promise of new methods and techniques is to be *Faster, Cheaper, Deeper*, but there is a niggling worry that we might be losing sight of what makes Ethnography so interesting and useful. Understanding how masters of classical martial arts have integrated underpinning technique and overarching philosophy can help us do the same for our craft.

Tireless practice, deep knowledge, rigor and attention to detail are all imperative for mastery in the practice of ethnography. However, many of the techniques and methodologies of design research as it is currently practiced are pointless elaborations- either dogmatically inflexible processes or fatuously meaningless gimmicks. In short, there is an immanent danger of proceduralizing design research in the name of effective Jutsu to the point where we cannot practice Dō. This could result in a process-focused practice, mired by preconceived notions of outcomes based on corporate environment that we inhabit.

Recently, Design Concepts embarked on a global strategic development project concerning diagnostic laboratories. Many of the people interviewed were high-ranking directors and executives, and very important customers to our direct clients. When visiting a consumer participant in their suburban home, it's easy to play the part of a naive and affable person who needs to be educated; in fact, much research calls for this type of approach. But it became apparent that this sort of behavior unsettled our clients- though the participants didn't seem to mind. Looking at the situation through their shoes revealed that it wasn't just a research project, it was also a very important high-level customer interaction. This meant that, in addition to getting the information needed, the team had to leave the end customer feeling like our clients were up to some really great work, driving home the point that the whole strategy and development of solutions was going to be built solidly on the end customer's needs. We weren't just studying them, we were also making a very important impression. So when we answered questions decisively, or even anticipated them, were we practicing bad ethnography? Was the technique flawed? On the contrary, smiling and nodding would have been less empathetic and ultimately less useful. To embody the Dō of ethnography, we had to set our notions of Jutsu aside.

Ethnography is more than watching people for an hour, or asking open-ended questions. The true Way of ethnography is to understand people in an empathetic and useful way- the techniques used are secondary. The Way of ethnography is the path of open understanding. This Dō is characterized by constant questioning, deep empathy, and an awareness of one's perspective. The Dō of ethnography is the Dō of understanding people.

DŌ AND JUTSU

Understanding and reconciling the concepts of *Dō* and *Jutsu* in order to better understand mastery in the field of design research is the central purpose of this paper. These terms have rather fluid definitions and are used differently across the world and in different communities. Dō and Jutsu do not apply exclusively to the martial arts, but the themes of mastery and clarity make the analogy to design research a particularly powerful case.

Dō and Jutsu in the Martial Arts

In the taxonomy of Japanese martial arts, there is a clear distinction between Koryū (lit. “Old School”) and Gendai Budō (“Modern Martial Way”). In ancient times, Japan was embroiled in intermittent violence, both from internal and external conflicts. Pragmatic fighting arts developed through iterative refinement and combat. These Koryū arts carry the suffix *-jutsu*, meaning technique or art. So *Kenjutsu* is sword technique, *Kyujutsu* is archery technique, *Iaijutsu* is quick-draw technique and so on and so forth¹. In the more modern age, once warring had ceased, more overtly philosophical practices formed on this foundation of ruthlessly effective technique. These arts carry the suffix *-dō*, meaning Way or path. Even in modern days, this distinction persists.

Dō and Jutsu are not opposites. In fact, they are intertwined in masterful practice of the way. Many ancient martial arts are still practiced today, not to perfect the technique of killing, but rather to experience personal growth and philosophical learning. By practicing and studying Kenjutsu, warriors embodied Bushido. All of the martial arts, but Swordplay and Archery in particular, have long been characterized by a close tie to Zen philosophy and the pursuit of enlightenment. The goal of Zen is personal. Enlightenment in Zen doesn’t come as a radical change; it is simply realization of the nature of ordinary life. This emphasis on clarity and understanding makes the analogy to the Way of ethnography doubly apt.

Dō and Jutsu in Strategic Ethnography

By “strategic ethnography” is ethnography executed as a means to an end. In design research, both the aspects of both Jutsu and Dō are necessary ingredients for success. Before we grasp the Way of ethnography, we learn and practice the Art. The Jutsu of ethnography is practical and pragmatic reality of practicing this art. When a researcher looks at a project plan and comments that there isn’t enough time budgeted for translation or recruiting, that is the Jutsu of ethnography. When an interviewer use their participant’s words to describe the topic at hand (even if technically incorrect), that is the Jutsu of ethnography. The Dō is a different thing entirely. Only through extensive practice does the Dō emerge. When a consultant feels the need to advocate for common people in the face of a predatory business opportunity, that is a glimpse of this Dō. When empathetic understanding is so

¹ *Ken* meaning sword, *Kyu* meaning bow and *Iai* roughly translated to mean “mental presence and immediate reaction.”

deep that the underlying nature of a person or interaction is understood personally, that is a taste of the Dō of ethnography.

Unfortunately, most ethnographers are not retained as philosophers or otherwise left to pursue this path purely. The profession of design research is similar to the lot of the tiny bird who cleans the alligator’s teeth. As practitioners, our goal is not simply to better ourselves through the pursuit of this path. Generally, the profession is driven by a separate goal which could be seen as lofty or mundane—to change things. This means that on the path of strategic ethnography, we must have an impact. Results must be produced. To meet these seemingly disparate goals of pragmatism and enlightenment, a balance must be struck between Dō and Jutsu. Err in the direction of Dō and efforts become irrelevant and useless, with no foundation in reality. Tip towards Jutsu and the magic of the work will be stifled, resulting in uninspiring, predictable and flawed outcomes that miss the mark entirely. Mastery of this way is elusive and dynamic.

Miyamoto Musashi and “The Book of Five Rings”

To understand mastery, we don’t need to look far to find a perfect example in the pantheon of the martial arts. Miyamoto Musashi (1584 – 1645) is arguably the greatest swordsman to have ever lived. He was a wandering *Rōnin*, (masterless samurai), who, in his quest for mastery, initiated staggering numbers of famous duels from which he invariably emerged the victor. In later life, he created recognized masterpieces of ink painting and calligraphy. He has been romanticized and imagined countless times in prints, novels, manga, television and film. His true legacy, however, is one of the most essential works on martial arts, strategy, and Zen: *Go Rin No Sho* (“The Book of Five Rings”). It has been referred to not only in the world of martial arts, but also in the practice of business. In the text, dictated to a pupil near the end of his life, Musashi lays out his “guide for men who want to learn strategy.” Interestingly enough, Musashi begins his treatise by drawing an analogy between the way of the warrior and the way of the carpenter (or architect). We’re essentially doing the reverse, comparing the way of the ethnographer to that of the strategist.²

The sword arts that Musashi practiced and wrote about place him squarely in the *Koryū* distinction of martial arts, and to be sure, much of his writing is about specifics of *Kenjutsu* technique. Interestingly, one of the main points of his work is that techniques, while important, are merely trappings of the way. He goes to great lengths to point out that dwelling on technical concerns is actually antithetical to his Way.

“The true value of sword-fencing cannot be seen within the confines of sword-fencing technique.”

- Musashi

² Musashi’s book speaks in terms of with *beibo*, or military strategy, but has implications for other strategies as well.

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In the ultimate statement of the irrelevance of tools, Musashi began to fight all of his duels, including his most famous and celebrated³ with a *bokken* (wooden sword), or even a crude stick. He was never defeated. So here we have the most famous and successful swordsman in history saying that techniques are essentially unimportant. Instead of dwelling on complex strategies or elaborate schemes, Musashi had no fear of death and struck his opponents down with pure intention. After training himself to a high level of capability in basic, essential techniques, he relentlessly pursued the heart of strategy.

CONSIDERING THE IMPORTANCE OF JUTSU

While it may not be easy to say that Jutsu is unimportant compared to Dō, it is an attractively simple point of view. However, Jutsu is the aspect of our craft that makes it real. Techniques are the means by which we teach newcomers, refine our practice, and explain what we do to outsiders. As the community of practice, we must push our Jutsu forward by improving how we execute our craft and creating new tools. The danger is that we will sacrifice too much in the name of productivity, predictability and repeatability. We must avoid fixation on techniques, myopic focus and a narrow definition of success.

Techniques Help Novices Learn

Techniques have names and procedural instructions, and sometimes even exist within codifying frameworks to organize and relate them to one another. These signifiers make them easier to teach to newcomers and explain to outsiders. There are many specific techniques in the martial arts. For example, Kenjutsu Ryu have certain attitudes or postures (“*kamae*”) in which to stand, and certain ways to hold the sword. Beginners learn details first- in the Katori Shinto Ryu, establishing three points of contact (left hand, hilt, right hand) between the head and sword in a high attitude ensures a quick and true cut. The student first learns simply to touch the sword to his head- the “why” comes later. Ethnography is very similar, though the techniques are generally less well defined than in the martial case.

When taking uninitiated clients out in the field, it’s handy to give them concrete techniques and rules to use and follow. It’s good to tell someone to see the world “with the eyes of a child” but in practice, do’s and don’ts (“Make eye contact.” “Trust your question and wait two seconds”) are more useful. These concrete tools provide a shared metric for the teacher (i.e. the ethnographer) and the novice (i.e. the client or initiate) to evaluate and hone performance. As consultants, having codified techniques with proven efficacy allows us to short circuit dissident process conversations and get down to work as a unified team.

³ The duel at Ganryu Island. Musashi defeated his most formidable opponent, Sasaki Kojiro, a young swordsman famous for a specific technique, “the turning swallow cut” with a bokken he fashioned out of a spare oar while being ferried to the duel.

Techniques Help Us Build Best Practices

Concrete techniques can be honed by a group of people through continued refinement, leading to powerful results. Freestyle practice may be very effective, but it is difficult to pass on to the next generation for further improvement. In the martial arts, this took the form of teachings passed down and improved through generations, resulting in a powerful practice that probably couldn't be developed by an individual⁴.

To a community of practice, techniques are very important. In a way, they should be the language that we speak to one another. When pressed to determine what's next for design research, many people would say “methods won't save us.” However, when promising new tools like internet-enabled ethnography or combined qualitative and quantitative analytics are mentioned, we take notice. It should be clear to anyone working in this field that there is still much room to improve our tools and practices. However, some of these infatuations with tools are tantamount to getting excited over a pencil and notebook.

Techniques Help Us Explain to Outsiders

Techniques might be the surface of the way, or a stepping stone for beginners to find the truth, but they help us explain the hard-to-grasp Dō in a way that is easy for outsiders to understand. Importantly, clients need to have some idea of what we're going to do before they can invest resources and trust in our way.

As a design researcher, I'm constantly struggling to succinctly explain what I do to people outside of the field. I think my parents have finally gotten the gist of it, but when a stranger asks “what do you do?” I hunker down for a long conversation. Part of the reason for this is that there's no set of commonly understood terms. Hence, the ostensible need for a Design Research canon. Armed with a shared terminology, we can establish ourselves as a mature field and an area of study, and better integrate into the mainstream, the rationale goes. A look at other fields (Economics, or Olympic Fencing, for example) shows this pattern. A set of techniques, well-thought-through Jutsu, would help us explain what we do to outsiders and improve our craft in aggregate. So why hasn't it happened?

Musashi saw the proliferation of the different “branded” techniques of his day ⁵ as meaningless dwelling on details, intended only to dazzle. In his defense, he defeated many of the acknowledged masters of his time. He writes:

⁴ There are many legends of martial teachings being handed down from heaven or developed by a single individual. In practice, most of these methods have most likely honed by progressive authorship.

⁵ During Musashi's lifetime Japan shifted from a period of civil war to the more socially rigid, if more peaceful, era of consolidated Tokugawa rule. The samurai class, formerly so important in the necessary business of doing war, started to become irrelevant. By this time there were many different professional schools of Kenjutsu, which competed to sell their services to various noble houses.

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“Recently, there have been people getting on in the world as strategists, but they are usually just sword-fencers ...If we look at our world, we see arts for sale. Men use equipment to sell their selves. As if with the nut and the flower, the nut has become less than the flower. In this kind of way of strategy, both those teaching and those learning the way are concerned with coloring and showing off their technique, trying to hasten the bloom of the flower...They are looking for profit.”

By this he means that certain “strategists” are concentrating on the visible, outer aspects of the Way to the detriment of its core. Harsh words, indeed. We argue similarly that while there are many different pockets of expertise and ways of doing things, much of the differentiation of methods we see today is just that- differentiation. We’re all engaging in the same basic activity. But as consultants, we need to stand out from one another. Just like esoteric sects of Kenjutsu, we need to keep our techniques secret so they’ll be effective in battle. Certain Jujutsu Ryuha⁶ went as far as developing secret deceptive weapons⁷ and proprietary techniques exist in almost every school of Kenjutsu. A graphic example is a certain means of puncturing the abdomen which arrests the target’s forward motion due to a physiological reflex. This facilitates a unique means of fighting because the swordsman armed with this proprietary knowledge can put himself in what would otherwise be an unfavorable situation and still emerge the victor.

In the past it might have been in our interest to obscure (perhaps not intentionally) the meat of what we’re doing from our clients, to keep the process under our control. The curtain is up now, but it seems that each consultancy still needs to have a different opinion and set of terms in order to differentiate themselves to potential patrons, leading to a confusing array of terms, techniques and methods. While transparency could build a

Ultimately, Results are What Counts

For techniques in martial arts or ethnography, it’s not novelty or variety that’s important. Rather, the efficacy of the technique applied is what counts. Bruce Lee famously said: “I fear not the man who has practiced 10,000 kicks once, but I fear the man who has practiced one kick 10,000 times.” We should use straightforward techniques and execute them well.

In Akira Kurosawa’s masterpiece of pop samurai fiction, *Yojimbo*, Toshiro Mifune plays a destitute but clever rōnin who comes to a town divided by two criminal gangs and plays them against one another to free the town. While the analogy doesn’t cast our client collaborators in the best light, the following scene illustrates an important point. Mifune first arrives in the town, literally starving to death and looking to sell his services as a swordsman. A villager tells him that if he wants to impress

⁶ Ryuha- a smaller offshoot of a larger school, or *Ryu*.

⁷ *Shikomibuki* fall into two classes- weapons disguised as inconspicuous objects (such as a dirk concealed inside a tobacco case) and weapons with special secret features, such as a fighting staff with a concealed spearhead or chain.

the bosses, he'll lop off an arm or two. Mifune finishes his meal, gets in a squabble with some of the thugs and soon he's killed two men and taken the arm of a third. He is hired shortly thereafter.

This is how we convince stakeholders we can get the job done- by doing it. Describing specific techniques we may use to address a project is helpful, but nothing beats an undeniable case study. However, the “process” behind any case study often gets converted into jargon-riddled consultant speak and the glimmer of Dō fades. We need clearer language that can communicate to outsiders both the efficacy of our Jutsu and the depth of our Dō. We must be grounded in practical interests and focused on application, but with an openness and affability for the process that preserves the underlying spirit of understanding. The lack of a shared canon is an impediment to the mainstream legitimacy of our field, but perhaps that's how we want it. Like the sword master, the ethnographer is an outsider.

BUILDING UP TO DŌ

Dō is what we are after- it is our path, our way. Unlike Jutsu, Dō is not a means to an end, but an end in and of itself. By utilizing Jutsu, by going through the practice, actions start to build greater meaning. When practice becomes a *Way*, the practitioner becomes an expression of some deeper truth.

“... making gardens, doing flower arrangements, or making tea, all had, at one time, a simple practical orientation...there were people who practiced these crafts masterfully. In their simple commonplace acts, refined to a high degree through practice, these virtuosi began to experience a deeper sense of purpose. They found that the simple movements of their body, the design of space, the forms they created and tools they employed, all seemed to fall naturally into a kind of harmonious perfection. Instead of ending up with just a cup of hot tea on a cold day (for example), these adepts experienced some deeper sense of reality, of humanity, of life.”

-Jeff Brooks

And so we should strive to uncover the Dō of ethnography. This Way is characterized by practicality, understanding, openness, awareness of perspective, and empathy. It means seeing to the heart of things. When ethnography is practiced in this way, the best possible project outcomes result. Perhaps we can even learn about ourselves in the process. The depth of understanding that we come to will be deeper and more poignant than the simple sum of the data that we've gathered.

Moving Beyond Technique

After hard training, repetitive practice and personal learning, the master moves beyond technique. Dō then exists as something that cannot be approximated or replicated by steps taken. The practice moves beyond the technical accomplishment.

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“In the case of Archery, the hitter and the hit are no longer two opposing objects, but are one reality. The archer ceases to be conscious of himself as the one who is engaged on hitting the bull's eye which confronts him. This state of unconsciousness is realized only when completely empty and rid of the self, **he becomes one with the perfecting of his technical skill, though there is in it something of a quite different order which cannot be obtained by any progressive study of the art...**”

-Eugen Herrigel, Zen in the Art of Archery

For the true master of ethnography, just like the master of kenjutsu, there is no set agenda. Perfectly appropriate techniques emerge out of thin air to meet the needs of the Way. This notion was embodied by Bruce Lee’s version of a codified martial art, Jeet Kune Do. Thirty years after his death, a version of this art is still practiced today. However, the foundational notion of JKD is that it is a “form without form.” It is perfectly fluid, and therefore perfectly appropriate for any situation. At the 2010 Design research Conference, Rick Robinson hinted at an ethnographic praxis based on a similar principal of absolute flexibility. However, there’s a catch. If you’re not Bruce Lee or Rick Robinson, You had better have a pretty ample Jutsu toolbox. This sort of absolute statement is perfect in principle, but it only works in practice if the one implementing it is a master versant in a wide range of disciplines, approaches, and techniques.

While it is less and less common given the current climate, an ethnography project that swings too far in the Dō direction can fail just as surely as an overly pragmatic one. Insights can be too deep if they don’t match the solution scope of the project. A researcher once joked: “if you dig deep enough, identity and safety come up in every project.” Surely, Maslow’s hierarchy of needs, or more refined frameworks (such as Systems Logics framework popularized by Jump Associates) attempt to codify insights by level and correlate them to outcomes. Regardless, almost any researcher has overstepped this bound and supplied insights that are true, very interesting, and not at all useful. It’s important to adhere to the Dō of strategic ethnography without losing sight of concrete goals.

Dō Infuses Everything the Master Does

Dō is not just a simple act- if we look to a master, the Dō of his/her practice infuses nearly everything they do. Even when the tea has been put away, the master of Chadō is still a master. Practitioners of martial arts in particular have known for a long time that rigorous study and practice in the art of fighting can have beneficial effects in almost every sphere of one’s life. The mental clarity required to release an arrow with true intention, or to blend the motion of your sword with an opponent’s is a gift that travels with you. It helps you confront everyday problems and...see to the heart of things.

If we extend this concept to Ethnography, we start to see all the places where the Dō of understanding people comes in to play, outside of field research. In our interactions with our clients and collaborators, as well as our understanding of people and systems of people that we may have never met, the Dō of understanding people should be present.

"The spirit of defeating a man is the same for ten million men. The strategist makes small things into big things, like building a great Buddha from a one foot model."

- *Musashi*

The Dō of Ethnography Outside of Research

Part of mastery is embodying the Way outside of the realm of technique. When we widen the scope of our Way to understand users, clients and collaborators we create powerful outcomes. From a Jutsu perspective, in-home, in-depth interviews are the technical basis for many of the techniques we use. While the situation is quite simple compared to others we might encounter, this creates a setting for truly deep, personal connection. Like Musashi's scalable strategy, the spirit of understanding a single person or a whole corporation is the same, embodying principles of openness, questioning and empathy.

Understanding clients as people is one of the most important tools a consultant ethnographer can have. The consultant lives and dies by this craft, but it is true for anyone with stakeholders and sponsors. Simply putting ourselves in our client's shoes can change how we approach our work. Understanding our collaborators is important as well, especially when their part in the process gives them a different view. In multi-disciplinary teams, we often find ourselves doing research and Ethnography along side people without a background in these activities. Some folks will have the knack for it and others won't, but it is our responsibility to guide the experience for our collaborators. Researchers also need to empathize, most importantly, with anyone who is adjacent in the design process, either before or after. Ideally, the development process is not a linear one with discrete phases owned by separate disciplines, but sometimes this is the simple reality of things. Knowing how our teammates see the world and the project, as well as what's expected from them, will help us empower those teammates and create the best possible outcome. I'm talking about research getting along with design. I'm talking about engineering loving research. I'm talking about phrasing research outputs not as hard and fast rules that are the mysterious outcome of some opaque process, but rather intriguing riddles for designers to solve and rational directions with transparent logic behind them for engineers to explore.

To the Master, Dō and Jutsu are One

In martial arts and ethnography alike, the way and the art are intertwined. Only through rigorous practice of specific techniques do we see beyond technique and understand the true nature of the Way. For the master, Jutsu and Dō are one and the same. The expert Zen archer, solemnly releasing arrows in a peaceful garden, looks in some ways identical to the expert archer in battle, loosing arrows towards the enemy. Meaning is endowed through practice. There are failure modes associated with both Dō and Jutsu- to achieve success in applied ethnography for design, we need to balance both aspects and

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keep the kernel intact. When we err in the Dō direction, we spend too much time and effort and our deep understanding isn’t useful or applicable in design outcomes. When we err in the Jutsu direction, we limit our thinking based on preconceived notions and the task at hand.

So how do we balance these aspects? Practically speaking, we need to focus on technical mastery and best practices when applicable and leave ourselves open to ambiguity when necessary. Knowing when to be abstract and unconstrained versus when to be concrete and focused is part of the unquantifiable expertise that defines our craft.

CONCLUSION

The most meaningful similarity between these Zen martial arts and ethnography is the emphasis placed on seeing the true nature of things. As ethnographers and design researchers, that’s exactly what we’ve been brought in to do. Musashi argues, along with many other notable Zen scholars that this is the fundamental essence of the way. In the fifth and final book of Go Rin No Sho, (The Book of The Void), Musashi lays out the fundamental aspect of his Way, relating it back to nature:

By void I mean that which has no beginning and no end. Attaining this principle means not attaining the principle. The Way of strategy is the Way of nature.

This could be taken to mean that all Ways are offshoots of one Way- they aren’t artifacts created by people, but rather expressions of an underlying natural order. Perhaps the Way of ethnography is not so hard to grasp after all. If we set out to simply, deeply, understand people, we can have a real impact on the world and preserve our craft. We’ve got to be pragmatic and idealistic at the same time. When the Dō and Jutsu and of strategic ethnography are in balance, the Way of understanding is realized.

As a parting thought, Musashi offers up 9 “broad principles” to those pursuing the Way of strategy, all oddly pertinent to those pursuing the Way of understanding.

1. Do not think dishonestly.
2. The Way is in training.
3. Become acquainted with every art.
4. Know the ways of all professions.
5. Distinguish between gain and loss in worldly matters.
6. Develop intuitive judgment and understanding for everything.
7. Perceive those things which cannot be seen.
8. Pay attention even to trifles.
9. Do nothing which is of no use.

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A Little Humility, Please

RICK E ROBINSON
HLB

"Things, not, mind you, individual things, but the whole system of things, with their internal order, make us the people we are." Danny Miller, *Stuff* (p. 53)

The fall of Icarus—wax melting, loosed feathers eddying as he plunges from the sky into the Aegean—is a central image in western mythology. A metaphor for the risks of hubris, it is also a provocative figure through which to think about the value which ethnographic research claims and the range of reactions to those claims. In 14th and 15th century painting, the Fall of Icarus was a relatively common theme for artists (and their patrons). But it was commonly related with a different emphasis than the way we recount the myth today: in the great Italian and Northern Renaissance paintings, it is Daedalus, father to Icarus, who is the sympathetic center of the tale. As inventor of both the fabulous wings and the labyrinth from which they enabled father and son to escape, Daedalus the craftsman, architect and inventor was resourceful, competent, and –except for the moment which landed him in King Minos' service—a man who blended great vision with endearing humility.

Daedalus was an inventor but also a close and skilled observer of nature. A practical scientist who studied and observed in order to create and improve. It should sound familiar. I'd not mind that sort of mythological association, if it weren't for the son. The son who pushed the invention past its envelope, forced it to fail, and in failing and falling, co-opted the myth and the inventor both.

Science is practical magic. At least, that's how most science got its start--simple reflection on the way things are, to no purpose other than knowing -- *that* comes after we've grappled with some aspect of the way things are that we'd like to change, to master. We -- those of us in practice--try, day after day, project after project, to make sense of the world for someone else, not just for the sake of sensemaking, but in order to change the world. Usually in quite modest ways-- a new tool, a better way to clean or to travel or to communicate. Sometimes we gloss over the profit motives that pay for the work, sometimes we agonize over them, often we construct rather elaborate justifications for what "better" means. And sometimes we simply find the problem too interesting to bother with the reasons we are being asked to understand it in the first place.

Whenever we undertake to understand something on behalf of an organization or an institution that makes stuff, or makes money, or makes policy decisions, we do more than simply offering understanding. In positioning our work as useful, we position it as an instrument of change. Thus we, too, are instruments of change: our acting is always critical, always subversive, regardless of how many cutouts there are between our intentions, between the ways we ask questions of everyday life and work, and the bottom line of an organization that asks us to ask those questions, asks us to understand those daily lives.

It is perhaps too simple and attractive to hide the connection between ourselves and our work behind an idealized notion of “making things better” – something I’ve done myself (Robinson, 199?), but no longer find convincing. “Better” really should require disciplined comparison between alternatives, against common standards. Atul Gawande, in *Better* and *The Checklist Manifesto* (2008, 2009), proves out the benefit, and the great effort required, of making one particular aspect of surgical procedure, better to a standard that matters a great deal: the mortality rate of surgical patients.

But in the work that we do, the outcomes are often less constrainable, the variables too many to even know what better could mean, let alone if we’ve somehow helped in making it so. And as I’ve argued before, the kind of change we enable often changes the underlying system as a part of the work itself. Uncertainty is part of what we provide, part of what is valuable to our clients.

For the past couple of years, some of my colleagues and I have been paying attention to the language in and through which the diverse kinds of groups who offer ethnographic research to partners in industry communicate their value and expertise, which we cluster under the rubric of ‘claims.’ It isn’t very challenging work to find that there are very few tropes involved. Most are some combinations of two: the ‘discovery’ trope; which is based on the notion that something of value exists in the world to be discovered. Often quite literally they offer to find the “hidden, unmet needs” that are, apparently, rife in nearly every aspect of human behavior. It seems a touch surprising that we humans are able to get along at all, given how shrouded our lives seem to be. The second is the ‘unique methodology’ trope, which asserts that one or more particular approaches to overall process, data gathering, or analysis assures some sort of value as an output. Uniqueness is an overriding virtue in this trope.

The nature of the claims that ethnographers make when representing themselves to the business world shouldn’t only affect how well they sleep at night. They also have an enormous impact on the expectations that our professional interlocutors have of the field as whole. When we claim that we ‘reveal’ something, that we ‘uncover’ that which has been hidden (by whom or what is rarely considered), we constitute the thing revealed as a simple truth. And ourselves as the diviners of the location where the truth has lain, rather than creators of those truths. In this, the way in which many professional practices market this work has come to have the perverse impact of *limiting* the range and nature of the types of inquiry that observational and ethnographic practices are understood to provide. “Discovering user needs” and the various forms of “product innovation” – each a class of claim—implicitly frame the work as “about” those ends in ways that elide much of the scope and diversity the work is capable of accomplishing.

What ethnographic research in industry has accomplished with simple conceptual contributions such as Lucy Suchman’s ‘ready to hand’ (1986) or heuristics like AEIOU (Blomberg, Burrell & Guest, 2002) is remarkable. The early work changed the way in which large swathes of consumer, medical, and technology was developed. But in the post-.com world, the proliferation of ways to deliver up the hype around ethnography’s contribution to “new”, to deliver “innovation” at the paradigm-shaking level, has seemed a struggle. I think that Icarus and Daedalus have something to show us. I think that

THE WAY OF “THE WAY”

the way in which we look at the relationship between practicing groups determines much of how the field as a whole grows, evolves: whether we get better.

The idea that very good work can and does come from aiming to support, not just aiming to invent. description and interpretation can both be terribly creative (that's the point of the covers notion in this context). And when we think about doing 'good work' in that frame, rather than in the 'discovery' model, there is tremendous room to be better than the other guy. But 'discovery' is either finite (the new lands model) or subject to Xeno's paradox, finding every slimmer just noticeable differences.

Ways of describing, ways of interpreting. The relationship between those two, or between pairs of pairs of them, is amenable to the work of style ("styling" seems very much the wrong, and dangerous, term).

Differentiation is at the heart of capitalism. Differentiation is the basis on which competitive (not absolute) value is built. Differentiation is *essentially* relative; the offer, the tool, the notion, which provides an edge at one time in one competitive set will, when all the major competitors adopt it, gradually (or suddenly) become 'cost of entry', and consequently of less value. Long-term value (strategic and tactical) lies in the ability of an offer to move from differentiating to required, to expected. As opposed to fads and fashions, which move from differentiating to irrelevant (though admittedly, some of those move back to differentiating over the long haul), this is clearly the more desirable course.

In the past twenty years, ethnographic research has moved from a tiny differentiating tool to broad acceptance. That's a good thing in terms of opportunity. But scale of use does not necessarily mean increase in value. And although Jerry Lombardi's 2009 EPIC paper uses examples in ways that I find quite disingenuously skewed, his idea that anthropological work is becoming commoditized in the private sector is a disturbingly legitimate characterization of evolution away from competitive value.

This is what makes claiming "uniqueness" of process or tool a losing proposition for the field as a whole in the long run, even if it might, for a while, be valuable for any particular group of practitioners, consulting or corporate. In my EPIC 2009 'b flat' piece, I argued that the notion of style, especially as James Wood explicates it in *How Fiction Works*, provides the loosely connected field of applied ethnographic work with a workable dynamic capable of driving change in the field more productively than methodology does. Working with Wood's characterization of style as a particular way of controlling ironic tension, of characterizing the relationship between voices, registers, imagined and real worlds doesn't mean that ethnographic work is itself a style to be contrasted to some other way of knowing, like quantitative survey work. Rather, it means looking at any given practice's way of working as of a style; that a particular way of tensioning the descriptive *is* with the potential *could be*, or *should be*, offers an enormous amount of room to express, to re-register, complex relationships without needing to claim, each time, to be finding or inventing, or revealing something novel.

Here, I think that an example from popular culture can again serve us pretty well (from work that Kris Cohen and I are currently doing). One of 2009's movie hits was Jason Reitman's "Up in the Air"

with George Clooney and Vera Farmiga in the lead roles. The opening sequence is, especially to those of us who fly far too much in the course of their work, a disturbingly precise ethnography/montage of airports, aircraft, hotels, and rental cars. The accompanying music is--perfectly--Sharon Jones and the Dap Kings' cover of Woody Guthrie's "This Land is Your Land." A genre-bending rendition of a Depression-era American folk classic reset in gender, race, (Sharon Jones is a black woman while Guthrie was a white man) and style (folk to gospel). And as the movie and the opening montage chronicle the day to day life of a white, professional man, the "ironic distance" that is opened between the music and the movie is brilliantly effective, an embodiment of the core of fictional "style" that Wood described at the heart of literature.

The 'cover' version of a classic song -- bringing a work to new and different life by altering one or more of the fundamental ordering dimensions of the original -- is a blend of hubris and humility from which the practice of ethnographic research might take new direction itself. The hubris takes the form of the willingness to appropriate, alter, and/or critique something that has worked successfully in an earlier form, venue, or purpose; a form that is often in some way understood to be 'owned' by an earlier originator or performer. That hubris is the Icarian aspect of covering. The Daedalusian, more humble act is to yoke in some significant sense one's own expertise and creativity, explicitly to the work of a forebear. To work within a set of constraints, or to acknowledge that you do, rather than creating all of the work anew. It is an essentially collaborative act, albeit usually asynchronously so. For academics, or academically inclined professionals, this acknowledgement is often the default way of working, sometimes to a (maddening) fault.

But to me, the appeal of the cover notion is in the way it encompasses both Daedalusian and Icarian engagement with a form, and what that engagement offers our work. Let's go back to "Up in the Air" for elaboration: Although the main charters are classically tragic (as in, their flaws are obvious and central), the tone and the storyline develop along lines that are equally deeply referential to the Hollywood romance/romantic comedy. And as the story plays out, the expectation that there will be a "happy" ending, even if it is a somewhat idiosyncratic one, is easy to fall into. And so, when the ending follows not the genre ideal, but something much more likely, much more realistically connected to the characters and their behaviors, it is paradoxically shocking and compelling. Reitman's play on the "Hollywood ending" forces a reconsideration of what you have seen; it opens the easily accepted up to reflection, and exposes the conventions of the genre as conventional. There is something about that moment of recognizing the expectation that speaks to me about the interaction between research work and the folks who make use of it. We have, over the past two decades especially, created a form, a genre, of relationship between questions, data, and uses. We can describe that form almost as typically as one could a pop song or a romantic comedy. And each time we perform it, we have the opportunity to follow the storyline or open it up. Or not to. Looking at the way that claims for expertise are made, it seems we rarely take the opportunity to open it up.

I think that the argument for a less splashily promotable notion of what the field contributes, and how it might best work with its partner disciplines: design, technology, engineering, strategy, lies not in perpetually claiming to uncover the new, but in engaging the "standards" of the field as if they were what we grew up singing along with.

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In talking about the notion of style in ethnographic work, the idea was to open up the space where ethnographic practices exist to a kind of evolution or elaboration that does not get measured against an academic ideal so much as it works out an expressive range, works out values through application and particularity. The expertises which make that possible are more than just anthropological ones, as we all know. They are expressive and communicative and visionary. In music, in art, in literature, in design, both the ‘standards’ of a style or genre and the instruments through which they are performed are played need to be mastered on the way to invention and contribution. It is the difference between interpretation and recitation.

Some of the central things from the work that this field does are like standards in the musical sense-- cycles and journeys, for instance. But you can no more 'discover' this for the first time than you can invent the core storyline of a romance, a heroic journey, or a tragedy. yet these forms don't lose their appeal as we find new ways to tell them, to tell them differently.

The explication and development of a *style* of work has a different kind of relationship between a practice and the collectively constituted field than the relationship among competitors does, though the two are neither mutually exclusive nor completely independent of one another.

The evolution of this as a distinct discipline might be taking the short sighted end of the available paths. Legitimation means, for this field, shaping a path that lies between academic rigor and practical efficacy. If we claim, always, to be unique, to reinvent, to do strategy, design, human factors, and clean the windows, there comes a time when we will have no partners to work with.

In his sharp, concise, but sweeping analysis of the American academy, *The Marketplace of Ideas* (2010) Louis Menand offers us a way of understanding our entanglement with the limits of disciplinarity. Menand's history paints a trajectory -- propelled by Talcott Parsons' separation of the social sciences – that has led to a generation of scientists for whom identification with their discipline is the primary frame of reference, and where “interdisciplinarity is a ratification of the existing order.”(p.96). For Menand, the vocabulary of objective and disinterested knowledge, methodology has overemphasized a distinction between hard and soft sciences that is much better understood as a continuum between “ways of knowing” that ranges from the empirical “way things are” to the hermeneutical “what things mean.” For Menand, most of human action and its study lies in between those two, a combination whose emphasis shifts as required, as the underlying structures are articulated, among combined, synthetic methodologies. Like ours.

Ethnography is a complex tool, a complex instrument. Using to make changes in the world is a form, a score, an idea which can be played in ways good or bad, valuable or blindly derivative. The value in how we express the relationship between instrument and score does not have to be positioned as a completely new thing, never before attempted in the history of research, like Oz and his balloon, like, now that we come to it, Icarus instead of Daedalus. What a glorious thing it would have been just to take those and get out of the labyrinth, get across the sea and away from the Minotaur. But Icarus just pissed the gods off.

The gap between what the tool is capable of doing and what humans can make it do is not an absolute one. An artist, in the deepest sense of the word, can always make the materials do something that predecessors and peers had never thought possible. As scientists and as designers, the shape of that gap, and the ways of bridging it, are the space in which we can develop distinct styles. Our audiences do not always need unique, unprecedented. They need the brilliance of the flying, despite the risk of the fall. The humility of doing that well and beautifully, and claiming no more than that, is enough.

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CLOSING KEYNOTE ADDRESS

Tradition and Innovation in Design – An archaeologist offers an anthropological view

MICHAEL SHANKS

Stanford University

Ethnography promises a deeper understanding of our relationship with things, with making and consuming, the distribution and exchange of goods, their eventual discard. Ethnography offers significant enhancement of human-centered design. Archaeology, Anthropology's time dimension, has developed a set of ethnographic practices of close documentation of the materiality (and indeed immateriality) of human experience, as well as an understanding of cultural change and innovation over the long term. Archaeology offers unique insights into the pattern and logic of human making, as well as into the genealogy of human being. All these are crucial to truly human-centered design practice. The theme of EPIC2010 - Dō and Do - offers a great opportunity to explore some of these archaeological insights. In particular I will explore intimate associations of tradition and innovation through the archaeological concept of "assemblage" - a shorthand term for the distributed, ontologically heterogeneous character of human making. I will show how lasting innovation is often built on a profound reception and engagement with tradition. Examples will be drawn from my expertise in European prehistory and Graeco-Roman antiquity, chosen to compliment the contributions to the conference.

Workshops

John Payne and Sonia Manchanda, Curators

W1: The Tao (DO) of Service: Japan's Traditional Shinise Businesses

CARL KAY, HIDEAKI SHIRANE, WAKAKO KITAMURA, Organizers

Some traditional Japanese service businesses such as certain ryokan inns and sushi restaurants have survived and thrived for generations. What makes them so special and enduring?

In innovative service, it is essential to build up and deliver a wide range of “hidden benefits” that create and maintain brand loyalty among users. While it is the grand attractions and famous characters that pull millions every year to Disney theme parks, the actual positive experience most guests have there is also the result of many small, carefully designed “below the surface” elements that help Disney deliver fun and satisfaction. These things are hard to identify and explain but also hard to copy. This workshop highlights the hidden touch points developed by some long-established, traditional businesses in Japan (called “Shinise” in Japanese) in order to deliver the hidden benefits that result in a superior, high value customer experience that is hard for competitors to imitate.

Using ethnographic video prepared for this workshop, participants will analyze the structure of several Shinise services and explore the reasons why they have delighted so many people over the years. In group discussions we will try to identify common elements to the businesses portrayed in the video. What kinds of interactions do they have with customers? How do they use timing, approach to the customer, employee attitudes and other elements to shape the delivery of their services? Possible concepts of interest include simplicity and cultivation of a spiritual sense of “no ego”.

Then in brief small group exercises we will apply the insights gained to a fictional case of a service provider that needs to improve its business. Our goal is that you go away with a greater understanding and appreciation of traditional Japanese service, a heightened awareness of hidden touch points and benefits and a beginning sense of possible applications in your own work.



W2: Next-Gen Ethnographic Practice

HIDESHI HAMAGUCHI, WIBKE FLEISCHER, and WILLIAM REESE, Organizers

Under pressure from market uncertainties, companies across industries are struggling to anticipate changes in the socio-cultural landscape that will affect future business. In this climate, ethnographers are challenged to develop tools that help industry leaders envision and adapt to change.

This workshop exposes participants to tools that will help them envision future developments. These include a trends timeline, scenario map, and scenario table. Participants will learn about, discuss, and help develop these tools as well as learn techniques for mapping possible futures.

WORKSHOPS

To enable common dialogue (and generate valuable new conference content), our domain will be ethnographic practice for innovation.

Workshop outputs include a set of projections about the possible futures of global ethnographic practice for innovation—focused on outcomes with a high impact on ethnography's ability to affect innovation.

Workshop facilitators include a business strategist, an anthropologist, and a trends expert; all with deep experience helping companies develop relevant and meaningful products and services in the face of significant market uncertainties.

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W3: Flash Mob Ethnography Workshop

LAURA FORLANO, Organizer

Flash Mob Ethnography is a hands-on workshop that is appropriate for both beginners and expert ethnographers. The workshop focuses on uncovering and identifying the role of values in urban infrastructure and the built environment (including public spaces, retail shopping environments, restaurants and cafes). Specifically, the workshop encourages participants to look for and document the tensions, surprises and counter-intuitive findings. Teams of three participants will take on the roles of Navigator/Sketcher, Note-taker/Interviewer and Photographer/Videographer. The workshop will pair Japanese and non-Japanese speakers as well as Tokyo residents with non-Tokyo residents in order to facilitate cross-cultural collaboration. Having lived and worked in Japan and studied Japanese, Forlano has used ethnography in both scholarly and industry research.

Workshop participants will take on specific roles and join groups of 3-4 people that will work together over the course of the 3-hour exercise. The following roles should be assigned to a member of each group:

- **Navigator/Sketcher:** Guide the group through the surrounding area and map or sketch the pathways taken by the group as well as individual spaces that are being observed. Bring back an artifact from the field research related to the theme.
Materials: Tokyo area map and sketchpad
- **Note-taker/Interviewer:** Take detailed minute-by-minute notes of observations. Interact with passers-by or people on the street as appropriate.
Materials: Small notebook or voice recorder
- **Photographer/Videographer:** Take roughly 200 photos and/or adequate video clips during the hour of observation.
Materials: Camera (mobile phone camera is fine) and/or Flip video camera

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W4: Modeling Diverse User Ecosystems

MIKE YOUNGBLOOD, Organizer

One of the enduring value propositions of ethnographic research is that it facilitates a deep understanding of the needs and expectations of “users.” In practice, however, our understanding of users is often very narrow. Typically, researchers conceptualize users as individuals who interact with something both directly and deliberately. This normative view overlooks the diverse range of interactions and experiences associated with products, services and environments. (Consider, for example, the many ways that people “experience” someone else’s mobile phone when it is being used in a restaurant or on a train.)

The reality is that most of the things we design are “used” in one way or another by a wide range of people whose experiences we probably didn’t carefully consider. These diverse users might be curious onlookers and voyeurs at the periphery of someone else’s interaction. Or they might be spouses, friends, colleagues, strangers, or anyone else drawn into an interactive role that they (and we) did not imagine or anticipate. Understanding these broader experiences can reveal opportunities to extend the value of products and services to larger audiences, optimize designs for varied social environments, and positively influence receptivity to product and service innovations.

This workshop is especially appropriate for people who have hands-on experience in qualitative user research. It will question the normative conceptualization of the direct and deliberate user. Its goal is to drive toward a more complex theorization of user ecosystems that takes account of multiple and diverse forms of engagement with design artifacts – engagements that are unintentional as well as intentional, indirect as well as direct, undesired as well as desired. In the workshop we will consider case studies presented by the organizer and by two pre-selected attendee presenters. Participants will discuss their own experiences in the field and compare case studies described by fellow participants from different parts of the world. In the latter half of the workshop participants will work in small, culturally diverse, breakout groups to generate models of multi-positioned user ecosystems and explore methodologies for gaining insight into the needs, experiences, and implications of all subjects who engage, in one way or another, the artifacts that we design.

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W5: Visually explaining ethnography. Communicating complexity.

ROBERTO HOLGUIN AND MÓNICA OROZCO, Organizers

Simplicity is power. How can we transmit and translate something that’s complex in a simple way?

Rich visualizations allow for complexity to become an aspect of immersion. Different reading levels involve a viewer differently, progressively presenting more detail. Complexity in a well-designed visualization becomes an issue of scale. Think of one of those detailed diagrams, the ones that are sometimes referred to as explosions. In those, one can appreciate all the parts of a car and see where they fit, how they interact, etc. The same can (and has been applied to ethnographic research).

WORKSHOPS

Workshop participants will conduct ethnographic fieldwork in Tokyo and use their shared experiences to explore new visualization techniques that simplify and communicate their ethnographic observations.

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W6: Ethnography and Quant: Scenes from an unlikely marriage

TODD CHERKASKY, MARTHA COTTON, NEAL PATEL, and ADRIAN SLOBIN, Organizers

Once upon a time, business folk saw truth mostly in numbers. For many a decision maker in the not so distant past, if a research finding didn't have a number attached to it, the validity of that finding was called into question. Happily, for members of the EPIC community, business folk now see truth in lots of ways: stories, photos, video, quotes, anecdotes, sketches, conceptual frameworks, and more. This is the result of the hard and impactful work of many from our community, and speaks to the growing relevance we have within the industries we serve.

Throughout this journey to industry relevance, we have frequently positioned ourselves as entirely alternative (and sometimes better) than quantitative approaches. However, in recent years, advances in digital ethnographic methodologies have started to blur the line between qual and quant, both in terms of execution and analysis. In the spirit the conference theme for 2010, this workshop calls for members of the EPIC community to expand our notion of our community, our understanding of our collaborative set, and challenge the EPIC growth trajectory. The workshop is intended to start the conversation about the value of occasionally “marrying” ethnography to quantitative research, and learning how to love their offspring.

Participants will complete a survey before they arrive at the workshop. Workshop organizers will present the findings from the quant survey and participants will break into teams. Teams will use the survey data to design an ethnographic study to supplement/complement findings from quant, or possibly think about how it might have had an impact in survey design (or both).

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W7: They just don't get it: Strategies, tools, and best practices for explaining ethnography to stakeholders

YUTAKA YAMAUCHI, JAMES GLASNAPP, PEGGY SZYMANSKI, NOZOMI IKEYA, and AKI OHASHI, Organizers

Ethnography is a popular buzzword, broadly used but poorly understood – and even harder to explain. Furthermore, ethnography is driven by the logic of discovery, not verification. Ethnographers don't bring their preconceived notions to the settings they study; they don't want to predict just what will be discovered before fieldwork has begun. While the inductive nature of ethnographic research is its strength, this very strength makes it challenging to explain the benefits to folks who operate in business environments where managers pre-set their targets.

The goal of this workshop is to share and leverage each other's experiences in explaining what ethnography is. The benefit for participants is to be able to anticipate and address challenging questions about ethnography, as well as fill in gaps about how best to explain it. Industry stakeholders will be invited to contribute to the workshop (e.g., potential clients of ethnographic research projects) and will share their experiences on the “receiving” end. We'll probe them on how they understood ethnography initially, how their understanding changed over time, what confused them the most, and what helped to clarify the confusion. The target audience is (1) ethnographers who are stumped or frustrated with repeatedly answering the hard questions, and (2) anybody who wants to clarify his or her understanding of ethnography.



W8: What we learned from the man with the missing toe: 3 principles to enrich your practice in any environment

EMILY FRANK and LISA REICHENBACH, Organizers

While there remains vestigial debate about what constitutes authentic ethnography in some circles, we believe the term mandates a specific orientation, which we might call the “way” of ethnography, yet is expansive enough to include observational and participatory research in many different social spheres. This workshop is intended as a forum for discussing participants' experiences of applying an ethnographic worldview in their research, and also for challenging us to consider how it opens up new ways of thinking about research in highly diverse settings.



W9: Strategic Dialogue Toolkit: Facilitated Methods for Design Researchers

PETER JONES and KALEEM KHAN, Organizers

Ethnographic researchers are often more at home in the field than in organizational settings and designers in the open studio. We often see competing internal goals trump insights from effective research-based design proposals, presentations and reports. The Strategic Dialogue workshop prepares participants with tools for organizing collaborative stakeholder workshops that help you establish joint ownership of the meaning of research.

This workshop introduces participants to collaborative sensemaking methods effective for creating strategic proposals following research in business and innovation contexts. The Toolkit presents methods developed and selected for their effectiveness following exploratory research, when a business or product strategy is required, yet still emergent and malleable.

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W10: Designing more Effective Workshops

JENNIFER GOVE and KATHY BAXTER, Organizers

Ethnographic data can be very effective in helping organizations innovate. While it often takes weeks or months to collect and analyze ethnographic data, much of the work that needs to be done comes afterwards, meeting with and sharing insights with stakeholders to ensure that the data has lasting impact. One way to generate change from ethnographic data is to use it in a workshop setting. But how do you conduct a workshop that is really well received and effective?

We will help participants set goals and define success for a workshop, explore some core workshop activities, and finally discuss ways to affect change and evaluate impacts from a workshop.

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W11: Golden Rules for the use of video in Design Research

FUMIKO ICHIKAWA, INDRI TULUSAN, and RIKKE ULK, Organizers

How do you capture difficult situations, peoples' reflections on the fly and very moments that may be difficult to share during fieldwork/field visits, without intruding the informant's most personal spaces? Video in the hand of the person enables to capture such situations, making it an empowering tool for conducting design research. In addition, as videos bring in so much information from one of the most intimate moments of their lives, the tool also provides a creative and co-creative means and supporting a shift from treating people as 'informants' to 'participants.'

The workshop is structured in three segments. First the organizers will teach from video case material collected in work with T-Mobile, Nokia, and Philip. Participants are encouraged to bring their own

case materials to present. Second, we will run an exercise in which we let our audience experience two primary recording approaches: Auto-Video approach, in which informants self-records the footage, and Videographer approach, in which researchers will be recording by shadowing interviewing or accompanying informants. Finally, we will explore ways to make video a more effective tool. The workshop has no prerequisite in terms of video skill and is suitable for anyone interested in learning to make video a more effective part of research.

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W12: Lost in translation? How to get the most out of cross-cultural ethnographic research

CHIHO SASAKI, TAKASHI SASAKI, and KEIKO IHARA, Organizers

You may have experienced fieldwork in a foreign country during which you appeared to keep missing the very essence of what you observed without even noticing it.

How can we get the most out of our next cross-cultural fieldwork? How could we do it better?

Participants will break into teams and will conduct a short observation/interview of local office workers at their workplace in Tokyo Midtown, the same place EPIC 2010 will be held. Organizers will assign each research team a unique set of constraints. For example, one team will work with a professional interpreter, while another team will conduct interview doing the interpretation “in-house,” meaning that a Japanese teammate will interpret conversations. In this way our workshop will walk you through typical obstacles of cross-cultural fieldwork, and will let us together describe a framework for effective observation methods in cross-cultural studies.

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Panel: Dō (道, Dō?) and Kata (型 or 形)

Rich Radka, Curator

Tour Organizers:

AICO SHIMIZU
Hakubodo Innovation Lab

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MCT / Daishinsha

Panel Discussion Facilitator

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Japanese masters tour and panel discussion

Theme

If **Dō** (道) represents the "Way" of spiritual, martial, or aesthetic disciplines in Japan, **Kata** (型 or 形) represents the "Form" of these disciplines. It describes the detailed choreographed patterns of movements practiced either solo or in pairs. The "Kata" is the practice that allows one to progress along the way to mastery. Though not all practitioners will become masters, they can gain valuable lessons and fulfillment by focusing on the "Kata" itself rather than the end result.

Structure

Exploring the relationship between these two concepts, we tried something new this year at EPIC 2010. We linked the evening city tour with the next day's panel discussion. On the evening of Monday 30/8, EPIC participants attended one of seven presentations by masters of Japanese disciplines. The next afternoon, Tuesday 31/8, the panel discussion was then based on what was observed, perceived the previous evening – and what relevance it has for EPIC.

A crowd-sourced panel discussion

A new aspect of the panel this year is that we did not identify panel members beforehand, but instead let each of the tour groups discuss what they've seen and choose their representative to the panel. Our goal was to create a more spontaneous and dynamic discussion; one that the entire audience was able to more directly relate to and participate in. Though only seven people were actually on the panel, the entire audience had shared the experiences that made up the content and were able to contribute from the floor throughout.



KOTO: Japanese Harp - Ms. Chidori Nishimura

Dō (道, Dō?) and Kata (型 or 形)



KADO - Flower Arrangement - Fujitsu Kado Club



SADO – Tea Ceremony - Fujitsu Sado Club



RAKUGO – Comic Story-Telling - Tokyo English Rakugo Club



Dō (道, Dō?) and Kata (型 or 形)

COSPLAY – Anime Costume Players - Tokyo City University Students



AIKIDO – Martial Art – University of Tokyo Aikido Club



MEIDO KAFE - Maid from Maid Café – Ms. Akiho Mizukawa

Insights from the panel

Seven panelists volunteered or were elected by their tour group to discuss what was observed during the masters tour, and to identify meaningful relationships and conclusions between what was observed and our practice of ethnography. We started by each panelist sharing several photos from their session and providing a brief overview of what they saw and heard the night before. Next the panel shared personal observations of what the “Do” and “Kata” were for each of the Japanese disciplines we had experienced.

Moving from these initial observations, the panel explored what the personal goals of each master was, and we then attempted to make connections between these goals and how we practice as a community and as individuals. As we tried to arrive at definitions for the “Kata” and “Do” within ethnography, it became clear that each person’s own tradition, professional experiences and sense of purpose and application of ethnography in industry would make it impossible to find a single, shared interpretation of each term.

However, reflections of the concept of “emptiness” from Kenya Hara’s opening keynote emerged in this discussion with the consensus that there are no real quick wins in ethnography; rather mastery requires a deeper understanding that feeds the practice – it may not always be visible to the client of the work, but without this element, the results would not be as valuable. And on the other hand, a dogmatic focus on the way of ethnography without recognizing the importance of the day in, day out activities misses out on the beauty and pragmatic value of process and method.

Artifacts

Carl Kay, Curator

A1: Virtual Ethnography system: analysis of word-of-Mouth on Blogsphere

KOUJI AOYAMA, TETSURO TAKAHASHI, TAKANORI UGAI 

Fujitsu Laboratories Ltd.



Cost-effective ethnographic approach with using Customer Generated Media (CGM) has been proposed such as blogging user experience as a journal (Jared, 2009). CGM such as blogs and twitter are described based on individual experiences, described on individual own words, and described of their own will. Therefore, CGM is a rich ethnographic data. We developed a virtual ethnography system that visualizes reputations for targeted product or service from CMG. This system enables us to conduct a drill down analysis by setting research questions corresponding to the visualized reputations. We commercialized this system as a service that extracting the product-reputation relationship (Takahashi, 2008). We display several research results of virtual marketing ethnography, like "The new product was a success with people who like car, but not with people who like music". We will provide an opportunity to discuss how to use CGM and methods of analysis as a tool for ethnography.

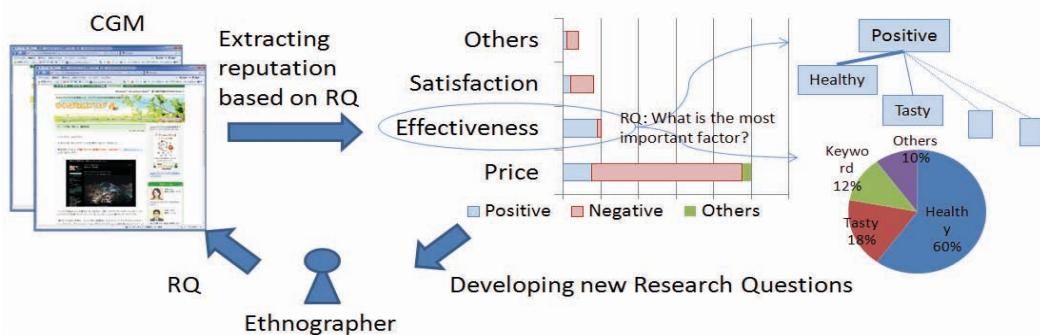


FIGURE 1. The virtual ethnography system

We are going to display research results of marketing ethnography which we have done with this artifact.

Case1: We applied the system to an analysis of advertisements for a product (Fig1). The system extracted reputations for the product from Blog posts. While the all-over result shows that the product had only 31% positive reputations. Then the researcher set several categories of reputation as a research question. It got high positive-reputation ratio in an aspect of 'Effectiveness'. The analysis also shows that people evaluate the product as 'Healthy' in this aspect. Blog posts and the system give us a 'drill down' analysis method as stated above which tell us how to advertise the product efficiently.

Case2: Since each Blog has own URL, we can recognize Blog authors with their profile such as 'car freak', 'music freak' and so on. The profiles allow us to analyze people more precisely, like "The new product was a success with

people who like car, but not with people who like music". We can target people specifically in marketing action using this result of analysis.

On the one hand virtual ethnography using CGM gives us the ability to understand people efficiently, but on the other hand, we cannot obtain exhaustive information only from CGM. We would like to provide an opportunity to discuss

- (1) strong point in using electric data such as CGM (e.g. large-scale, speed, cost),
- (2) weak point (e.g. reliability, demerit, in exhaustiveness), and
- (3) how to use CGM and methods of analysis as a tool for ethnography.

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Takahashi T., Okamoto S., Tomosawa D., "Analysis of Word-of-Mouth on Blogsphere", Knowledge sharing network, 2008

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A2: Self-ethnography as a valid substitute to classic ethnography?

EVA CASPARY and JEANNE CARRE

Insight insight Europe gmbh, Frankfurt, Germany

Study purpose was to accompany the life of young German mothers over a longer period of time (2 years, starting at 6 months pregnancy for some) to explore their changing needs, attitudes, behaviors in this transitional phase in their lives and to understand the impact and role on product needs, communication, purchase behavior and the family influencer/decision making role.

Optimal approach was considered the use of ethnography. Time and budgetary constraints made this approach in its full blown immersive format not feasible. Hence the decision to form and train the study subjects to co-researchers and to use them as their own ethnographers. A total of 36 young mothers were recruited. They were trained in an initial half-day workshop on how to observe themselves and their peers and given a set of "tools" to help them perform this task:

1. "Handbag notebooks" with different topics and chapters to be used as a constant companion throughout the day into which thoughts, reflections, discoveries and observations could be noted at any time (see Figure 1)
2. Monthly self-reflection diaries (see Figure 2) focusing on a different topic every month (e.g. communication, care, mobility, finance, etc.)
3. Online blogs to exchange and compare observations throughout the process

In addition, the team of co-researchers was reconvened every month in smaller sub-groups to share and reflect upon their mutual findings. During these sessions, the understanding of the ethnographic

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approach was also further deepened. A final tool complementing the research approach consisted in the use of filmed ethnographic interviews at the mothers' homes or throughout their typical daily trips (accompanying them to the playground, to their daily shopping, etc.) (see Figure 3).

This complementary approach led to very deep and comprehensive insights into this specific life-stage which can be considered one of the most drastically life-altering. The different "artifacts" used were a great contribution to its success.



FIGURE 1: Artifact 1: Handbag Notebook



FIGURE 2: Artifact 2: Self-Reflection Diary



FIGURE 3: Artifact 3: Film from Ethnographic Interviews



A3: Incorporating Seasonality into the Research Process

GABRIELLE ACKROYD

Truth Consulting / University College London

An emergent theme from my UK-based study of Agas (cast iron stoves first introduced to the UK in 1929 - www.agaweb.co.uk) and their owners was the strong connection they have with seasonality. In a number of cases, Agas acted as a mediator between people and their environment, with users feeling 'closer to' their environment and surroundings through using their Aga.

Seasonality constitutes a rhythm that is potentially significant in a range of contexts, but the impact of this rhythm is potentially harder to access through research, partly because of the long time scales involved if direct research is done, and partly because of how people experience seasonality, for example prioritising current experiences and neglecting others, especially over the relatively long (in terms of perception) timescale that seasonality takes place.



As I develop these ideas further, I would like to invite discussion on strategies to research seasonality, in particular through usage of photography in the research process. *

In more traditional anthropological contexts, in some cases seasonality might have been seen as something to overcome, within the parameter of a typical year of fieldwork – findings should cut through seasonal variance to provide an overall picture. However, in current contexts, commercial ones in particular, seasonality, and impact in patterns of usage and/or consumption is of particular significance (e.g. Daniels, 2009; Miller, 2009). Whilst the relationship between the experience of owning and using an Aga and the changing of seasons is particularly pronounced, there is undoubtedly significance in many other contexts.

Whilst this importance of seasonal contexts may often be recognised, directly and indirectly incorporating seasonal change into programmes of research may be problematic for a number of reasons. Balancing seasonal research (which at its most expansive would be conducted over the course of year) with project time-scales and other commercial requirements is undoubtedly difficult. In addition, where the research process does not include different seasons, how are seasonal differences located and extracted from participants who may over and underestimate seasonal differences, given the perceived lengths of time which lapse across seasons.

As the primary area for discussion, I intend to collate thinking on strategies for incorporating and addressing seasonal patterns into research through the use of photography (both administered by the researcher and the participants. Photographs constitute the primary artefacts for this session. Other supporting strategies (currently being investigated) are likely to reference diaries, usage figures and approaches to seasonal questioning cues.

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Miller, D (2009) *Stuff*, Polity Press

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A4: 3-D

HECTOR M. FRIED

Ethnographies have been documented in photographs and film, but often only in pop-culture do we see film and photography in 3-D representations. To better represent the context of space and engage the reader/viewer I suggest that ethnography should also venture in to the 3-D realm. In a paper, “The Racilaization of Space”, I have taken a market plaza that appears to be an Asian oriented space and created 3-D images, such that a viewer may gain a better picture and experience of people who see, frequent and utilize this plaza. Illustrating the plaza with 3-D images also serves as a subtle metaphor for the reader/viewer to promote the process of attached meaning for space and place in the visual recreation that my ethnography seeks to describe. Furthermore it appears to be that under these premises most ethnographies dealing with the context of space and place will benefit from 3-D representations.

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A5: Making Public Administration Less Burdensome for Citizens

JACOB SCHORRING

MindLab

INTRODUCTION

All citizens engage with public administration at various stages in their lives. This is especially the case in a welfare state like Denmark, where public expenses counts for 56 percent of the country's GNP.

The citizens, of course, have an interest in receiving public services that are valuable for them, e.g. the right treatment in hospitals. Ensuring this has been top of the agenda for many years in the continuous development of the public sector in Denmark. However, the engagement with public administration that is required by citizens to receive public services, e.g. bureaucratic procedures, is also an important part of the citizen's overall experience of these services. The outcome of the public service might be what the citizen – or society – wanted, but the citizens overall experience might be devalued by burdensome encounters with the public administration.

The scope for the work on making public administration in Denmark less burdensome for citizens, has until now been limited to reducing the nominal amount of time that citizens need to spend with the public administration to receive public services or comply with public policy.

ABOUT THE PROJECT

In the last three years MindLab, a Danish cross-ministerial innovation unit, has completed numerous studies helping key decision-makers and employees in Danish ministries view their efforts from a citizen's perspective. Across these projects, we have learned a lot about what makes citizens perceive public administration as burdensome. And we have learned, that nominal amount of time spent with public administration is not in itself a

problem for citizens. Drawing on these experiences, MindLab is currently running a project with the aim to describe new directions for the Danish governments work on making public administration less burdensome. The project will:

- Explore what “burdens” mean for citizens as well as what make citizens perceive engagement with public administration as burdensome.
- Pinpoint the situations that particular segments of Danish citizens experience as the most burdensome.
- Develop new ways of representing insights and new policy/ public service initiatives by other means than traditional governmental memos.

THE “ARTIFACT”

A poster that, in a visual style, will highlight how citizens perceive encounters with public administration and what they find burdensome. A design game with physical game-pieces that is used to translate the insights from the visual-style format to new public policy initiatives will also be presented. We hope to provoke a discussion about whether the insights from the project can be applied in public sector innovation in other countries and/ or in making customer engagement with private companies less burdensome.



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**A6: ‘Belonging and Belongings’ – Short Film Installations ion the
interrelationships of Techno-Social Styles**

DAIJIRO MUZONO, GEKE VAN DIJK, BAS RAIJMAKERS



Fig. 01 Techno-Social Styles Mapping



Fig. 02 Examples of Visual Ethnography Studies Held in London, August 2008

Context:

Belonging and Belongings is an international collaboration project conceived by three scholars with differing perspectives and disciplines. This project aims to explore the interrelationship between **technology, society and sartorial appearances** to explore how people express their identities through their physical and virtual possessions. We position our domain of research within a triangle of **Techno-Social Style**, where ethnographic research reveals unique compositions of identities in the context of service design, sociology and fashion.

Whilst Dr. Van Dijk is specialized in **social research for service innovation**, Dr. Rajmakers employs **documentary film** as an analytical and practical means to conduct ethnographic research. In addition, Dr. Mizuno specializes in **fashion design research** in cultural studies. Acknowledging the differences, we have a common platform in sociology and ethnography. We believe that the inclusion of such mixed disciplines contributes to provoke new ideas in the way we understand the complexity of one's identity in **contemporary culture**: friends and communities in SNS, technological devices people carry, how people dress etc are all intertwined under the umbrella of identities.

Up to present, a number of studies have been conducted in **Amsterdam**, **Tokyo**, **London** and **Kyoto**. During the past year we worked with students at Chelsea College of Art and Design and Kyoto University of Art and Design to explore how the results of ethnographic research can be expressed in visual-driven formats to better transfer and provoke ideas.

Question:

We hope to provoke discussions on the following topics in particular:

- What can ethnography reveal about Techno-Social Styles?
 - How can design documentary contribute to the exploration of the way people express multiple identities?
 - How can the format of video installation support the transfer of ethnographic knowledge and provoke discussion?

Method:

We aim to produce films and video installations:

- Four films on the theme of vulnerability / particularness / multiplicity / empathy
 - Loop presentations of respective film, duration of 5 mins apx., using four monitors
 - Supporting quotes from open source footage of BBC TV series Virtual Revolutions

Expectations:

We expect to provoke discussion on the use of a video installation to communicate the concept of Techno-Social Style:

- Exploration of inter-disciplinary research through a series of film narratives
 - Inspired by contemporary art formats (e.g. Kutlug Ataman and Fiona Tan)
 - We will capture attendees' responses on an experimental display



A7: An Ethnographic Visualization Method for Creating Shared Vision

NORIYUKI KOBAYASHI, UGAI TADANORI, KOJI AOYAMA, AKIHIKO OBATA
Fujitsu Laboratories Ltd.

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We presented an ethnographic visualization method that helps to develop a shared vision by visualizing relationships among members' values, and briefs. Knowledge management researches showed that a shared vision among a community is indispensable for knowledge creation (Senge 1990, Wenger 1998, Nonaka 2000). Discrepancy between what people say as the vision (espoused theory) and what people really do (theory in use) (Argyris 1974, 1980) sometimes lead conflicts and failed to get a shared consensus to get achievements. Each member is explored what they want to be (visions), and what they should do for them (briefs) in ladder up and down manners. Visions and briefs are mapped into a tree where relationships between values and briefs are retained. We use this method in an organizational change project and successfully resolve a blame culture, and create a shared vision.

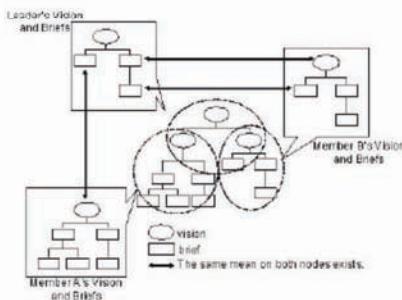


Fig1. An image mapped three member's visions and briefs

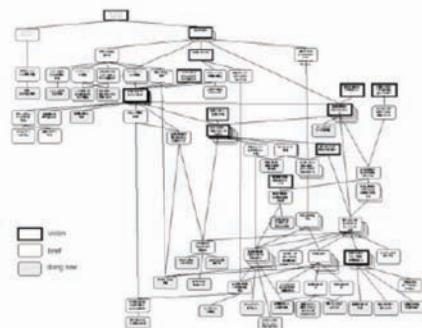


Fig2. An example of mapping visions and briefs

In this poster, we show an ethnographic visualization method. We would like to discuss various ways of visualizations techniques with participants.



A8: Deconstructing Spaces: The thick and thin of it

PRIYANKA DESAI

Coral Research Services Delhi, India

We, at Coral Research, were commissioned a study where the primary objective was to understand in depth the concept of space, in order to input in to the Client's future communication strategy.

To begin with, the research team realised that as a function of the study being conducted in busy urban cities, the informants (consumers) would tend to lean towards the more obvious viz. physical aspects (constraints) of space. Therefore, it seemed imperative to supplement the ethnographic interviews (where we focussed on how the women deal and interact with space), with a cultural understanding of space. In this context, we delved in to references and associations from popular culture where consumers subconsciously deal with space. E.g. space in relationships, Zen design, a de-cluttered desk space etc.

This understanding helped the team in gaining a multi-layered understanding of 'space'. The final framework began with the functional realms of space, moving in to the emotional and connative layers before finally arriving at the fundamental truth of space.



A9: A parametric approach for ethnographic design research

PRITI RAO

In a faraway village of Orissa, India reside a group of artisans who identify themselves as the *Bhulia Meher*. The *Bhulia*'s weave intricate floral, curvilinear and geometric patterns (known as *ikat*) to earn a living, but also to tell a story ~ stories of idealised forms of beauty, rituals, mythical and animal characters. The artifact in return bestows identity upon the *Bhulia Meher* for whom *ikat* is not simply a *means to live*, it is the *way of life*. This intimate and symbiotic relationship between the *maker* and the *made* forms the basis of my *parametric* approach for ethnographic design research.

By focusing on the artifact and the journey involved in its making; the imagination, aspirations, relations and value systems of an ethnos could be made *visible*. The knowledge generated is intended to go beyond an illuminating description, to one that can inform enabling approaches to improve artisan livelihoods.



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HOW THE ARTIFACT INTENDS TO PROVOKE DISCUSSION?

The artifact (photograph) aims to generate interest in this small and skilled group of artisans in Orissa, India. In their life, in which, the boundaries of work and leisure, working spaces and living spaces, individual and enterprise, maker and the made, are seamlessly blurred. Into their rhythmic and cyclical way of life where activities, seasons and festivals; birth, life and death are one long continuum.

With respect to ethnographic methods, it hopes to provoke a discussion on the focus and role of the ‘object’ in revealing an ‘ethnos’. While objects typically tend to play a secondary role in ethnographic studies whose primary focus is on humans, what happens when they are given centre stage or used as an entry point to gain access to an ethnos? What can the ways in which artifacts are made, possessed, exchanged or consumed tell us about the deeper, underlying values and beliefs of a people? In what contexts might such parametric approaches be justified or be more useful than approaches that focus directly on human aspects? Can such a distinction between the ‘maker and the made’, the ‘user and the used’ be made? Is it useful?

On another note, the artifact intends to provoke discussion around the new frontiers of ethnographic design research. Ethnography is increasingly being used in design disciplines where the purpose is not just descriptive but also ‘prescriptive’ [1]. In other words it is explicitly being used not just to study ‘existing situations’, but also to move towards ‘preferred situations’ [2]. What implications does this have for new hybrid forms of inquiry and knowledge production?

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[1] Frankel, L. (2009), ‘Communicating design research knowledge: A role for ethnographic writing’*Rigor and relevance in Design. International Association of Societies for Design Research Conference*, Coex, Seoul, Korea. 18 to 22 October, 2009. Available at: http://www.iasdr2009.org/ap/navigation/program_day5.html(Accessed: 28 April 2010)

[2] Simon, H. (1982), *The sciences of the artificial*, 2nd ed, MIT Press, Cambridge, Massachusetts

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A10: Unfolding the Unspoken

JANE MEJDAHL and RENE LUNDGAARD KRISTENSEN

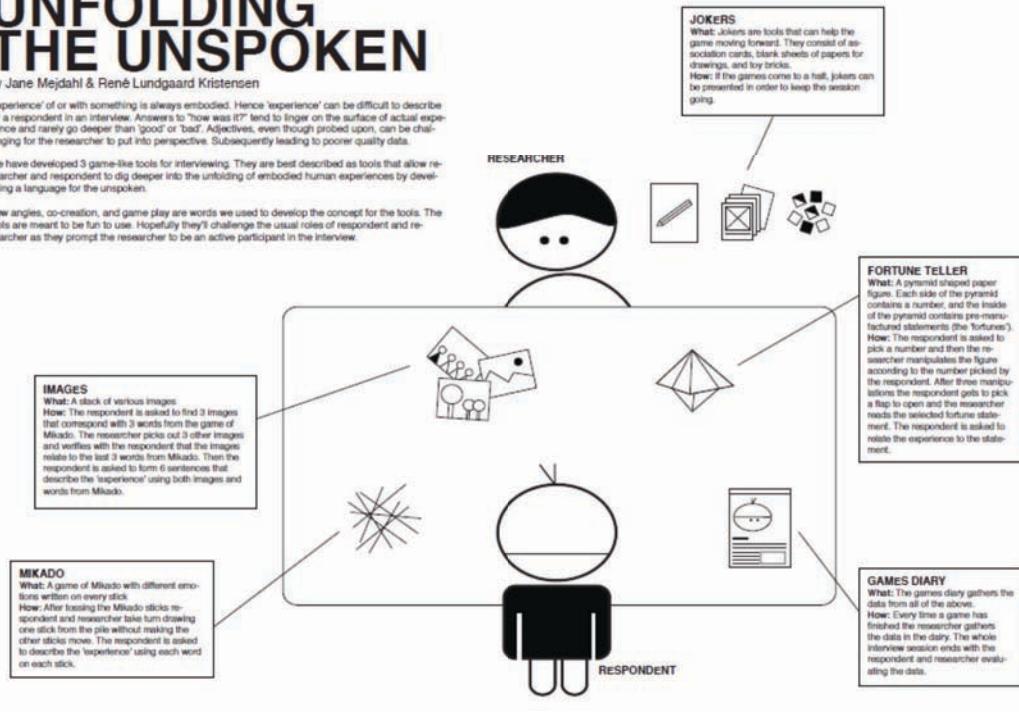
UNFOLDING THE UNSPOKEN

by Jane Mejdaal & René Lundgaard Kristensen

'Experience' or with something is always embodied. Hence 'experience' can be difficult to describe for a respondent in an interview. Answers to "how was it?" tend to linger on the surface of actual experience and rarely go deeper than 'good' or 'bad'. Adjectives, even though probed upon, can be challenging for the researcher to put into perspective. Subsequently leading to poorer quality data.

We have developed 3 game-like tools for interviewing. They are best described as tools that allow researcher and respondent to dig deeper into the unfolding of embodied human experiences by developing a language for the unspoken.

New angles, co-creation, and game play are words we used to develop the concept for the tools. The tools are meant to be fun to use. Hopefully they'll challenge the usual roles of respondent and researcher as they prompt the researcher to be an active participant in the interview.



A11: Emphasizing ‘Research Design’: Examples of how small and medium size companies approach user involvement

RIEM ZOUZOU
Danish Technological Institute

As part of a public funded user innovation project, 'Active User Typologies – active users in an innovation perspective' we are creating a set of guidelines to assist participants from small and medium size companies in doing user research with their customer and end-users. The purpose is to gain a better understanding of their user's preferences, troubles and wishes in order to develop new products and services. The participating companies are from different branches and vary in size and company culture. They typically have limited development resources and are not familiar with a user centred approach.

During the project the company participants pay much attention to which kind of end-users to involve and which methods to use when involving them. When looking into these methods and user types it became clear, that the company participants were challenged in making a 'research design'. This means that the company participants were looking for ways to define the research 'problem', scoping the project and gain a general understanding of how to structure their whole approach to user involvement. This is an important step as the research design typically is defining for the project as a whole.

When looking into ethnographic method books the preparation of user research, the 'research design' is often presented as something dynamic that evolves in relation to what is studied. This is often accompanied by a "reflective" approach to methods and 'doing ethnography'.

Tid	Hvad	Hvordan	Hvorfor - Output	Hvem
Okt./nov. 2009	Profil på AD aktive brugere	Identifikation, kontakt og aftale til aktive brugere blandt kunder og andre relevante deltagere.	Sikre at de aktive brugere repræsenterer målgruppen, der umiddelbart besidder de innovationskarakteristika vi ønsker.	AD / Anna
Okt./nov. 2009	Mødeudviklingsmøder i baser	Udvikling af nye ideer til rådgivning og service? Brainstorm format, hvor der genereres et stort antal ideer	Dokumentation i form af en oversigt over det samlede antal ideer og begründelser for og beskrivelser af ideernes potentielle.	AD / Bo
Okt./nov. 2009	Idéudvejledelse og dokumentation	Udvigelse af de mest relevante og interessante ideer til det videre forløb	?	AD/Anna
des 2009	AUTO- Projektplan ver. 2	Uddybet projektplan. Præcisering af innovationsfokus, prioritering af aktive brugergroper, dækning af udarbejdelse	Opnå enighed om mål, og nævnen aktiviteter i projektet.	*Blem
dec. 2009	Profil på AD aktive brugere	Medarbejder i AUTO-typologien beskrives en profil på AD aktive brugere typen blandt kunder, potentielle kunder og interesserter. Det er vigtigt at være opmærksom på, at der er potentielt mange aktive brugere	Typologien og AD's aktive bruger profils skal sikre et effektivt match mellem aktive brugere og innovationsmodellens trin.	Riem

Metode	Self, others, team		Workshop	Contextualizing
Projektphase	Projekt	Opstart	Udvikling	Afslutning
Præsentation: Designfase	Identitet, bænk og bænkebrug	Navn, funktionstur, service	Identificering og nyt oplystning af bruger	Udskrivelse
Bruger Type: Bruger Rolle	Ressource	Udvikler	Bruger	Køber
Lead user	(X)	X	X	
Passioneret Professional		X	X	
Mårig bruger	X			
Kommentator	X		X	X

FIGURE 2. USER RESEARCH SCHEME ON USER TYPES

Working with small and medium sized companies it is clear that the company participants need a set plan and a clear scope of the project rather than an unfolding reflective, exploration.

As a result we are at present trying various ways of creating research designs that makes sense to the company participants.

We are using various types of visual lay-out to present the research design. We use plans that show the research plan as a typical project plan, schemes that highlight specific research elements such as which user types to engage and models that use figures and shapes to illustrate the overall approach.

We noticed that the company participants easier grasped the research design when visually represented in a model. At the same time this results in an emphasis on research design as a significant part of the project. Consequently we continuously explore how to make research design visually more apparent in user centred projects and how it can be made appealing to company participants and invite them to consider their problem statement and research approach.

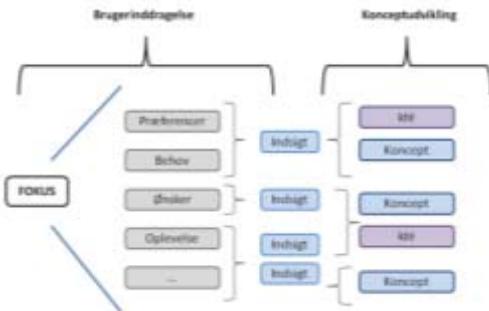


FIGURE 3. USER RESEARCH DIAGRAMME

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A12: Opening the Doors to User Involvement: User-Centred Tools as Ambassadors and Engagement Artefacts

METTE ABRAHAMSEN, ANA MARIA D'AUCHAMP and RIEM ZOUZOU
Copenhagen Living Lab

As part of a public funded user innovation project, 'Service renewal in practice - Service innovation in smaller trade firms' we created a set of tools with the goal of engaging participants from small and medium size companies to carry out research with their customer and end-users. This was in order to gain a better understanding of their user's preferences, troubles and wishes. The participating companies were typically small family run businesses and typically have limited development resources and were not familiar with a user centred approach.



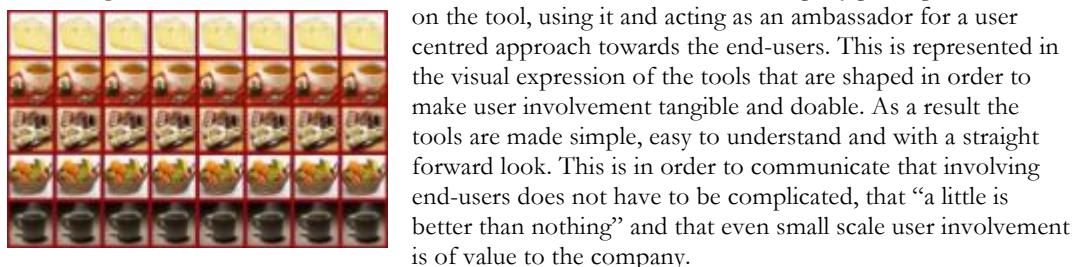
The tools are made for the companies to further develop service concepts in line with their exiting company offers. So they functioned as a dialogue facilitator and documentation structure to assist the company participants in exploring themes relevant to his business.

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A tool example is the ‘week plan’ used by bakers to interview their end-users about their eating habits throughout the week. Based on the result the baker is able to make offerings that fit with end-user appetite.

Another tool example is ‘service bingo’ used by plumbers to explore their end-users idea of ‘service’. By using a set of cards depicting different kinds of services the end-user is interviewed about how they understand the illustrated service and how they would prioritize between the services.

In this way the tools serve a two-fold purpose of facilitating the interview session and at the same time must motivate the company participant to take



on the tool, using it and acting as an ambassador for a user centred approach towards the end-users. This is represented in the visual expression of the tools that are shaped in order to make user involvement tangible and doable. As a result the tools are made simple, easy to understand and with a straight forward look. This is in order to communicate that involving end-users does not have to be complicated, that “a little is better than nothing” and that even small scale user involvement is of value to the company.

Just as the tool has a two-fold purpose when making the tools ethnographic insights on both the company participants as on interviewing inform the tool design and we continuously explore into the ‘good fit’ and visual expression that translates from these insights.

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A13: Ethnographic Video and Toolkit

ROBERT MURRAY

Sapient

Communicating what we learn from research is as important as the research and methods used to uncover the insights that fuel our work.

Thanks to small applications and some browser plug-ins, it is now incredibly easy for ethnographers to create effective video stories to connect with audiences outside our field. Using a tool like animoto.com along with several small user-friendly applications gives ethnographers a highly cost-effective communication platform to create stunning presentations.



My submission is a video toolkit to produce videos that summarize ethnography projects in ways that go beyond clips and quotes. The toolkit consists of several off-the-shelf, easy to use and highly affordable (some are free), programs and plug-ins that can allow ethnographers to create stunning videos that can get non-ethnography audiences excited about a project and communicate key themes and insights.

The toolkit consists of the following applications: Animoto.com, Wordle.net, QuickTime Pro, Vimeo, IskySoft, 3D Timeline, Cool-Iris, Photo-to-movie, Screenography, and Download Helper. I know the list reads like an un-manageable list

of geeky software, but the secret is that all these programs are incredibly easy to use and enable researchers to better communicate the observations, themes and insights that are at the core of our work.

LINK TO VIDEO EXAMPLE: <http://animoto.com/play/fzGPniAXHy2OkU073k9myw>

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A14: Transmitting the Empathy

HIDEAKI SHIRANE and WAKAKO KITAMURA

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Innovation overthrows the current standard of success in the industry. It redefines not only the existing structure of markets, but also the traditional system of corporation itself. This means that if the insight gained from ethnographic research is powerful enough to lead to user-centered innovation, you are likely to see a serious resistance from internal stakeholders in the process of delivering those findings into product/service development phase.

One powerful way to melt the resistance away is to provoke “Empathy” for users among diverse project teams. Acquiring and reporting crucial insights from user research is not the final goal of ethnographers. The more important thing is creating a structure which encourages team members to become more aware of what the user is like, and to keep stirring their hearts and imaginations.

Transmitting the Empathy is a series of installations to promote a corporate culture of Empathic Design. Each tool is designed to be enjoyed and appreciated alone, and it produces emotional attachment of team members to

ARTIFACTS

the actual user insights. The findings from ethnography will be communicated, circulated, and widely shared in the organization through the following tools:

1. Ethno Puzzle: A jigsaw puzzle of user insights. A description of an insight is on the backside of each piece. A representative scene of the user will appear on the upper side by putting all pieces together.
2. Digital Insight Frame: A digital photo frame which displays a day in the life of real users.
3. Persona Paper Craft: Desk-size figures of personas made of paper.
4. Persona Movie: A short documentary video of personas.

In our presentation, we will discuss the challenge of driving organizational change by making appealing use of ethnographic findings.

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A15: Extracting Context-based UI Requirements with “Fukuwarai” tool

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It is important to uncover user's hidden needs and requirements through ethnographic research especially when developing the professional-use products. For such products, the contexts often are more complex than you can imagine, and a failure of understanding context directly leads to an unsuccessful requirement definition. To identify user interface requirements for the next ultrasound system, we have engaged in hours of field observation at hospitals. Observing doctors scanning and making diagnosis with ultrasound systems provided us with rich insights about the quality of experience that users seek for. On the other hand, in terms of the insights related to user interface (UI) requirements, we could only spot several usability problems such as buttons hard to reach and typical operational error. Their task execution was perfectly organized. Observing repetition of fast and accurate system operation, like a well trained pianist, did not lead us to capture potential user needs derived from its contexts. To solve this problem, we have created “Fukuwarai” tool and tried to use it for the interview. Fukuwarai is a traditional children's game in Japan; the players whose eyes are covered with a cloth pin different parts of the face (such as the eyes, eyebrows, nose and mouth) onto a blank face. “Fukuwarai” tool was created based on this concept. It consists of full scale blank paper console and paper buttons cut out individually. Participants were instructed to move or pin each paper button onto the blank console as they wish and to explain the reason. As a result, the effects of “Fukuwarai” tool are considered as follows.

1. Externalize the UI requirements derived from the contexts such as an ideal bedside manners that doctors would like to have and kind of issues doctors place greater importance on their everyday work.
2. Helps to enrich understanding of contexts, especially when researcher cannot communicate with participants while observation.
3. Easily engaged by participants for this tool is familiar and easy to understand. It might be useful as a strong participatory design tool for professional-use product

At EPIC 2010, we will display “Fukuwarai” tool and present the detailed result. We would like to provoke discuss about possibilities of “Fukuwarai” tool for ethnographic research.

Kakko Chan : A Board Game Without Instructions

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Introduction

The introduction of the Web has increased the accessibility of information to ordinary consumers. Among the many consequences of this, one trend is on consumer's choice of products. Consumers' preferences have fragmented and it has become increasingly difficult for designers to create design artifacts that satisfy a large number of customers. One approach to address such a shift, is to design an environment where customers may themselves inform designs throughout the design process and to see the solutions as continuously evolving and informed by the customers.

To illustrate this, we have created a board game, called Kakko Chan, as one such environment. Users are not required to read instructions before playing the game and are able to engage in the game by their own intentions. Using this board game, we aim to understand the processes by which users discover and understand the rules of the game.



Figure 1 : Kakko Chan.

System Design of Kakko Chan

The Kakko Chan is a board game where users play by making a face using a set of parts provided to them. A user can make various types of faces by changing the position and orientation of the parts. Figure 1 shows the Kakko Chan board game as depicted. When designing the game, we focused on the following two points.

1. Provide as little instruction as possible

Instructions typically try to define what can and cannot be done. This would limit the amount of spontaneous ways to play this game; therefore, we designed the game in such a way as to allow users to play with as few instructions as possible.

2. Select versatile components for the game

It is important to select components of the game that users may employ in various ways. We have opted to use a component that has the shape of a bracket, which is called kakko in Japanese. A kakko is a versatile component as it can become for instance any part of the face by changing the position and orientation.

Given the two above design principles, we have come up with the following design choices.

1. Usage of Magnets

In order to have as little instruction as possible, we used magnets which act as physical and invisible constraints. We specifically selected neodymium magnet as it has stronger magnetic force than regular magnets so that they play a role as a guide where to place a kakko. The magnets were embedded in the board. We selected the most appropriate combination of magnets and the board material by trying different combinations.

2. Positioning of Magnets Holders

We placed the S-pole face and N-pole face magnets alternately on the board as a place holder for kakkos as depicted in Figure 2. There are a total of 12 magnet holders. Placing the two poles alternately creates spots where magnets do not stick at all. This makes places where users can place their kakkos more clearly. Moreover, this repeated rebound and inquiry allows users to enjoy a unique floating feeling among the magnets.

Placing three N-pole face magnets on a kakko, as shown in Figure 3, makes the stability of rebound and inquiry much stronger.



Figure 3 : Three N-pole face magnets on a kakko.

3. Number of Combinations

There are eight variations of how to put a kakko on one magnet holder as depicted in Figure 4. Users can make a different kind of face by changing combinations of the position and orientation of kakkos.



Figure 4 : A magnet holder consisting of eight N and S pole face magnets.

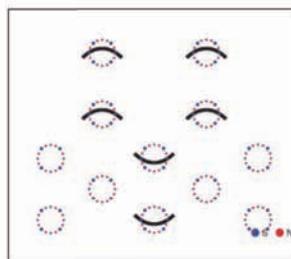


Figure 2 : The 12 magnets holders embedded in the board.

User Study

We have demonstrated the Kakko Chan board game on two occasions. First at Tama Art University on January 9th to 10th in 2010 and the second time at Roppongi Axis Gallery on March 6th to 7th in 2010. Users were given a task of making a face on the board and asked to play without any further instructions.

The purposes of this user study were to 1) see whether users can understand what the game is about and 2) given that the user understands the game, see whether he/she is actually able to make a face and also whether the user is interested in playing to begin with.

Results

We have found that there are mainly two types of patterns in the created faces based on data collected from visitors at the two exhibition locations, namely, a pattern that many people come up with and patterns that only few people come up with. In the former case, users would place kakkos on one of the eight positions in each magnet holder and make a face. In the latter case, users would place more than one kakkos on one magnet holder. Looking closer on how users have come to make such a rare combination of kakkos and the usage of magnet holders reveals some interesting insights on how users discover and understand the rules of the game. For example, the longer a user plays with the game, the more he/she finds things he/she can or cannot do, which leads to a creation of more variations of faces. Moreover, such user also tends to make something else than a face by devising different ways of rearranging things. These two phenomena seem at first to happen by accident and then develops from there to the discovery of new rules. The discovery of new rules seem to happen faster if the user has seen other users play and thus has understood the basic rules beforehand.



Example 1 : Common face patterns that many people make

Example 2 : Rare face patterns that few people make

Conclusion and Future Study

We have made a board game called Kakko Chan and observed how users come to discover and understand the rules of the game when there is no instruction is given. As a future study, we would like to further investigate this learning process more closely to see, for example, how the learning process differs from user to user. We hope to form this research in a way that contributes to the design of an exploratory design environment itself with further user studies and investigations to come.

A17: Are You What You eat? A food-related lifestyle (FRL) segmentation

PATRICIA MEDINA and CÉSAR HOLGUÍN

In situ

Stating that the food one eats has a bearing on one's state of mind and health, Anthelme Brillat-Savarin wrote in 1826: "Dis-moi ce que tu manges, je te dirai ce que tu es." (Tell me what you eat and I will tell you what you are). Although Brillat-Savarin didn't mean his quotation to be taken literally, we believe that through ethnography we can bring a whole new meaning to this now popular phrase.

Last year, one of the major processed foods companies in Mexico entrusted us with the task of segmenting Mexican families according to their food-related lifestyles. After conducting a qualitative and quantitative research we were able to identify five segments based on attitudes and behaviors regarding the purchase, preparation and consumption of food products.

By getting an in-depth acquaintance of these segments, we were able to observe that beyond food-related lifestyles, these people shared fundamental values, beliefs and personality traits, leading us to a couple of intriguing questions. Can the job of the ethnographer border within the grounds of divination by seeking knowledge of the future of the unknown? If so, is it really possible to determine how a person feels and behaves on the basis of what that person eats?

With the resolution of those questions in mind, we developed a research methodology that helped us to identify and uncover the link between consumer's intrinsic values and the products they buy. By this, we discovered not only behavioral patterns, but graphic implications on sensible symbols for each segmented population.

**Tell me what you eat and
I will tell you what you are**



During EPIC we will present an artifact result of this investigation, consisting on a set of cards that allows us to penetrate on a person's set of values and beliefs throughout their food choices. Each card contains a depiction of a food product on one side, and on the other personality traits, values, conducts, specific tastes or beliefs related to the choice of that specific product. The assistants will participate on an exploration of the archetypical dynamic of the "divination" process: they will select products within a food category and in return, they'll obtain a detailed character profile or portrait of how they are or behave.

By sharing this methodology and its results we want, first of all, to generate debate and provide new ideas on how a segmentation can be done, the results that can be obtained

through it and the actual implications that they may have on the design or development of new products or services. On the other hand, we also want to know if this value system applies only for Mexican consumers or if it can be replied for other cultures.

So please, ladies and gentlemen, tell us what you eat and we will tell you what you are.



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