

Design Ethnography

ACKING OTHER criteria, we make judgments based on our own culture, values, and experience.

The trouble is this narrow point of view isn't effective in the global marketplace. Design ethnography extends the cultural panorama. Illustrating this strategy and trying to decipher its implications for developing products and services, Tony Salvador, Genevieve Bell, and Ken Anderson ponder the relationships between the American family room and the Italian kitchen table, between food shopping and the importance of friendship.

by *Tony Salvador, Genevieve Bell,
and Ken Anderson*

Anthropologists are legendary for their studies of exotic peoples around the world. The images linger in the public imagination: Margaret Mead playing with children in Manus; Colin Turnbull sleeping in a crowded leaf hut with the Mbuti pygmies; Clifford Geertz running from the law while attending a cockfight in Bali; and Claude Lévi-Strauss going deep into the Amazon rain forest to "capture" native practices before they disappear. For nearly a century, anthropologists have been our cultural translators, gathering stories about differences, learning a little about ourselves and others along the way, always trading in the global as a series of interconnecting (sometimes disconnected) locals.

We have made sense of the "local" through ethnography, a portfolio of methods that have been developed to understand the perspectives of people by observing and participating in activities of everyday life. We have been the "merchants of astonishment" in print, in our classrooms, in popular



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culture—bringing tales of distant cultures and strange customs.¹ Now some of us are merchants in corporate settings—bringing tales of distant consumers and unfamiliar customs. We call ourselves design ethnographers. We try to look deeper into what people do, what tools they use, and how they think to understand how to better make and sell products. The process of making sense of other people is never easy, and making sense of how other people make sense is even more difficult. But it is something that must be done if we are to make and sell products of value, whether we attempt to do this in our own native cultures or countries, or whether we try to export them elsewhere.

But here is what causes us angst: The people who could most benefit from our

1. The phrase "merchants of astonishment" was coined by Philip Kilbride, an anthropologist at Bryn Mawr College, in Pennsylvania. It refers to the ways in which anthropologists trade in images of the exotic.

work in a corporate setting are also the most likely to question its relevance. Design ethnography challenges the traditional twin operating perspectives of business and production. As design ethnographers, we offer a third way, a complementary and compelling perspective that requires us to bridge two distinctly different operational environments: work and home. Ethnography, broadly defined, is a methodology used to represent the perspective of everyday life. Design ethnography focuses on the broad patterns of everyday life that are important and relevant specifically

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for the conception, design, and development of new products and services. At work, designers, marketers, and developers are often entirely circumscribed by their work culture. At its best, ethnographic research in an industry context reconnects these workers with the worlds they inhabit and helps them imagine worlds they may have never seen, from the mercato

(market) in Italy to the streets of west L.A.

In this essay, we explore some of the ways in which ethnography can inform design by refocusing attention on the details of everyday life that are meaningful for design. We first discuss what design ethnography is, and why it is valuable to the corporation. Then, drawing upon two case studies, we examine how this approach can influence design and how the corporation can manage this influence for domestic, as well as foreign, markets.

Why Design Ethnography?

Design ethnography is an emerging discipline that draws on many of the theories, practices, and methodologies of anthropology, as well as other social-science disciplines, such as psychology, sociology, and communications. Design ethnography is based upon understanding what people do, what they say, and what they think. We do not ask consumers what they want; instead, we strive to understand how they live. This represents a significant shift from relying solely on surveys, focus groups, or intercepts.

Fieldwork, as a rite of passage and as a research method, coupled with participant observation (the notion that one learns by doing and by watching) has always been central to anthropology's distinctive epistemological standpoint. As design ethnographers, we still rely on fieldwork and participant observation as basic grounding principles. But while Margaret Mead was able to make 12 trips back to the field over several decades, we are often constrained by business demands and time. Our field trips are brief—an afternoon in the mall, a week in museums, a fornight in Italy. These compressed time frames compel us to draw on a wider tool kit of ethnographic methods, including interviewing (structured and informal), genealogies, social mapping, demography, photography, documentary film making and videotaping, observation, archival research, and "deep hanging out" to shape our sensibilities, knowledge, and understanding of the fragments of life we study.² We also draw on a range of theoretical paradigms and interventions, as well as pay particular attention to popular culture, to help shape the questions we ask and the conclusions and insights we draw. Post-modernism, feminism, Marxism, Ann Landers, *People* magazine, the popularity of professional wrestling, the *New York Times* best-seller list—all these subtly influence our work.

A basic assumption of design ethnography is that people here, there, or anywhere are not just consumers. They are social beings, people with desires, wishes, needs, wants—some articulated, some unrecognized. They form complex social units and maintain the basic fabric of daily life while actively transforming themselves and their environments, creating new meanings, experiences, and commodities as needed, wanted, and justified. Clearly, there is an interplay between what people desire and the new products, services, and technologies available to them. And design ethnography gives us a language and a set of practices for talking about this ongoing invention and reinvention of products, meanings, and cultures. Discovering—even understanding—

2. "Deep hanging out" is a term coined by Stanford University anthropologist Renato Rosaldo to capture that sense of being profoundly immersed in a culture, although one remains actively engaged with more-explicit research agenda and methods.

people's ideas, beliefs, values, and behaviors is not enough in the corporate setting. We need to transmute these ideas, beliefs, values, and behaviors into perceptions useful for design, marketing, and engineering.

There are two reasons why design ethnography has something to offer to industry specifically and business practices more generally. The first is deceptively simple: designing technology that consumers want and need. Until recently, many companies relied either on their developer organizations ("If we build it, they will come") or on their marketing organizations ("56 percent of our respondents wish for a better detergent"). While one also cannot ignore the fact that many companies have been successful using one or both of these approaches for the development of new products, one also cannot ignore the vast number of product failures, which everyone knows about, but which also go undocumented.

Design ethnography is a way of understanding the particulars of daily life in such a way as to increase the success probability of a new product or service or, more appropriately, to reduce the probability of failure specifically due to a lack of understanding of the basic behaviors and frameworks of consumers.

The second reason that design ethnography is so compelling is a little more complicated, but worth understanding. Design ethnography interrupts the divide between work and home. We bring the voices and lives of the end user or consumer out of the home and into the business world. Currently, there is a "context cavity" between living and working. Perhaps it is more of a contextual asynchrony. Who we are in the workplace is very different from who we are at home. Each environment values different behaviors and skills. A century ago, the vast majority of Americans lived on and around the family farm; so for most people, living was working and working was living. There was contextual synchrony; a better tractor was design meant better living. In America, one hundred years of urbanization and industrialization has created and reified a divide between work and life.

The irony, of course, is that although these American workers (engineers, designers, product managers, marketers) are the people who live in the homes we design for, something happens to them when they go to work. Individually, they adopt the corporate culture—those norms established and main-

tained by the corporation to facilitate an efficient and productive workplace.³ Collectively, they are individuals whose perspectives on both working and living conform to the norms of a particular group, which to facilitate the productivity and efficiency of the corporation for which it works, must express less variability around those norms than does the population as a whole. Indeed, the collective expression of self in a workplace is even smaller than what any one individual expresses in his or her own homes, and yet it's understanding the expression of home life that's important for designing products for the home.

Design ethnography, both in its practices and its insights, provides designers and engineers with a language in which they can talk about experiences and behaviors that are critical to life, conversations that in the first person are not always valued in a work context. Design

ethnography can bridge the gap between work and home. It also provides a schema in which it is possible to value and utilize ethnographic observations, without requiring them to conform to strict scientific notions of data. (Our participants do not make facts, they do acts.) It is uniquely the role of the design ethnographer to express the relevant context of one culture to another, to narrate the acts. Design ethnography, because of its anthropological legacy, renders the global marketplace into a series of commensurate local environments.

In the sections that follow, we offer two examples of the kind of research design ethnographers are doing. While both are related to issues of the global marketplace, they illustrate different methods and design con-

3. We can only speculate that similar disconnects exist in other cultures. There is a long tradition of participatory design in Scandinavia, for instance, in which designers and engineers actively seek the participation of a wide range of consumers affected or implicated in the product or process in question.

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siderations. First, we provide a brief discussion of the pitfalls and challenges of doing design ethnography outside the United States. We then examine the ways in which ethnographic methods can be deployed to shape insights into e-commerce experiences.

The Table Is Life: Designing for Italy

Sitting at the dining room table late one afternoon, we are discussing with my hosts the differences between American and Italian households. Sophia, the matriarch of this northern Italian home, wants to know about the American "family room." We tell her it is a room with comfortable chairs, a television, and sometimes a computer, where the family gathers to do things together. She looks at us bewildered and asks, "Don't they have kitchens in America?" Sophia goes on to tell me that in Italy, in her house and in the homes of her extended family, the table is the central place. La tavola e la vita—the table is life. In this brief conversation, the local is revealed, and we scribble frantically in our notebooks. It is the defining moment of the fieldwork.

We spent two weeks in Italy, "hanging out" in a small town about 45 minutes north

Figure 1



A typical, minimal midday table setting in an Italian household. Utensils are not yet set.

of Venice. We were there to explore the domestic economy, to examine the ways in which Italians inhabit their homes, organize their days, engage in commerce, and use or refuse different sorts of technologies, everything from packaging to computing. We hoped to generate ethnographic insights that would suggest spaces into which new technologies could be designed. So when Sophia told us that the table was life, she was not just stating a cultural fact, she was also articulating an important design consideration.

Doing fieldwork in Italy, even short-term fieldwork, required a return to some very

basic ethnographic methods. We actively immersed ourselves in day-to-day life—participating in social activities, cleaning, child care, elder care, meal preparations, and shopping. We asked questions, we did what we were told, we took notes, we took photographs, we watched, we were questioned, we were questioned. We even took genealogies and asked people about their family histories. And while this method was time-consuming and offered no immediate insights into potential products or services, it helped us establish trust; we cared enough to ask about familial connections, and we listened to the answers. (It did produce shoeboxes full of photographs that, in turn, suggested a possible space for digital imaging technologies and image sharing.)

Establishing social intimacy is one of the hardest aspects of any fieldwork project. It is hard to be both an outsider/observer and an insider/participant. Ordinarily, anthropologists spend months, sometimes years, in the field, establishing trust and social intimacy and finding a comfortable way of negotiating the observer/participant roles. We don't have the luxury of all that time, and as a result, we frequently forfeit a certain level of nuance and texture.⁴ However, there are ways of efficaciously establishing social intimacy. These include employing translators/consultants with strong connections to the local community, selecting field sites that can be readily explored in a limited amount of time, and doing a lot of homework (that is, combing through existing ethnographic literature and market research, as well as local histories, film, and other culturally appropriate representations).

Consider this brief example of findings and implications: It was clear to us that food, family, and social relationships differ from those in the US and, in fact, appear to account for a large number of daily activities. We noted that there was no such thing as "take-out"; there wasn't a paper cup or plate or a plastic spoon or fork to be found. Indeed, one of us was questioned for drinking water out of a porcelain cup. To Italians, water tastes best and is properly drunk only

4. By the same token, unlike most academic anthropologists, we have access to a wider range of resources (that is, consultants, market research, and existing research), and we are not constrained by the need to carve out a research project that will sustain and support tenure.

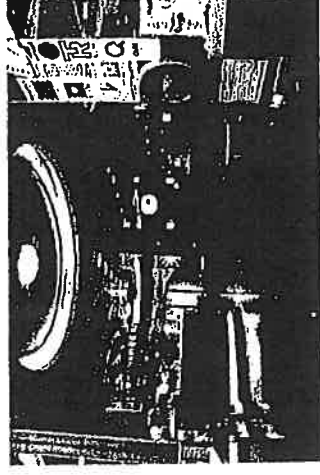
out of glass; coffee on the other hand, is always served in porcelain cups. We didn't see too many cars with cup-holders. Even the gelateria, the Italian version of an ice cream shop, was aesthetically appealing and, by American standards, surprisingly formal.

Similarly, household food provisioning was accomplished through an intricate set of familial and social relationships in combination with the scheduled availability of certain foods. Many families rely not only on locally available foods and wines, but also on foods and wines provided by a spouse's family in a neighboring town. Meat is acquired, when available or as needed, from a brother who happens to have a butcher shop, bread from the uncle who is a baker and who also knows, for instance, that Serena is too infirm to walk and therefore needs her bread to be delivered. Fish, fresh and in upward of 40 varieties, arrives on Mondays at the open-air market—the best, no, the only, place to get most kinds of fish in the entire town—which means that fish is generally consumed early in the week.

These two simple facts—no disposable table settings, coupled with complicated provisioning patterns—suggest many design possibilities. Clearly, eating establishments are less about sustenance and more about an active life in public spaces. Creating new foods should complement existing establishments and existing patterns of public life. A great example of a successful new-product introduction in this area is the wide-spread adoption of limoncello, a liqueur distilled from lemon peel and traditional to the provinces of Naples and Caserta and the island of Ischia, in the south of Italy. The liqueur, consumed after coffee, which itself is consumed at the end of the meal, has been marketed throughout Italy and is currently in vogue as a replacement for more-traditional liqueurs or sorbet from the respective local regions. It is best served ice-cold, in the manner of sorbet. Although it is unusual in all but the southern part of the country, limoncello is an authentic Italian beverage whose marketing, through mass media and to local establishments, has created a new and popular product. The product fits in well with established eating and public social patterns in that it arrives at the end of a long meal, is served ice cold like the familiar sorbet, works well with readily available glassware, and is positioned for the table as

opposed to “take-out.” In this context, one might get the impression that a high quality of product and experience, high authenticity, and a sufficiently-but-not-too-novel product are important characteristics for the Italian consumer. One might be right.

Figure 2



An ice-cream shop in a medium-size Italian town.

E-Commerce: Store or Story?

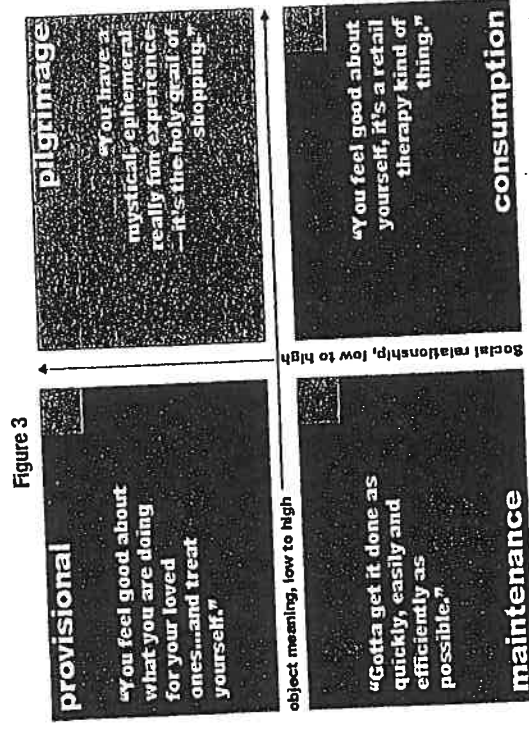
It may be obvious that studying daily life in Italy—or the US—is an appropriate context for design ethnography. However, less obvious domains of study are also approachable by using these methods. One of these is retail e-commerce, which is clearly gaining attention for obvious business reasons. We have studied e-commerce using ethnographic techniques as a design question—that is, “What characteristics of the Internet (broadly defined) are relevant to the design of retail establishments?” It’s not dissimilar to marketer Paco Underhill’s anthropological approach to understanding physical store shopping behaviors. Underhill’s research asks the basic question: “What changes can I make to this store to increase sales?”⁵ It is a design question that requires understanding people’s explicit and implicit shopping behaviors.

In our study of US-based retail commerce, we employed a variety of methods to derive an e-commerce design framework. These methods included photo surveys of retail ecologies, interviews with personal shoppers, photo diaries of a week’s worth of purchases and subsequent interviews and focus groups, a live documentary of a shopping excursion for a group of women in Seattle, historical review of shopping habits and statistics, and a global survey of the ethnographic literature of shopping. In addition, we interviewed several owners of

5. Paco Underhill, *Why We Buy: The Science of Shopping* (New York: Simon & Schuster, 1999).

businesses that operate either entirely or partially on the Internet. No single data source was by itself conclusive. Rather, the analysis required thinking deeply about all the data and how it all fit together from the perspective of identifying the potential value of retail e-commerce to real people.

On the basis of our research, we generated a framework (figure 3) that shows the four basic shopping ecologies that emerge when you pay attention to American consumers' experiences of shopping. The four commerce ecologies are framed by two con-



These four retail "ecologies" are organized by whether the actual object has high personal meaning and by whether the social relationships surrounding the transaction are high in personal meaning.

tinua: the importance of the object being acquired (does it have high social meaning or low social meaning?), and the high or low social relations that are implicated in the purchase. In the maintenance ecology, the basic story line is to get it done quickly and efficiently. Examples of this culled from our data include buying gasoline for your car, getting your auto insurance renewed, and paying the lawn-care company for mowing your lawn. A second narrative ecology is consumption, in which the main point of shopping is to feel good. This type of retail therapy would describe the purchase of that new bike you've been wanting, or the blouse you just can't live without. We believe at this time that the consumption model operates more intensely in America than in some other countries—for instance, Italy. The provision form is about conducting retail

commerce for the purpose of tending to others—for example, taking care of the needs of your family. Perhaps obviously, this includes grocery shopping, and perhaps less obviously, it includes buying supplies for that deck (or other home improvement) you are working on.⁶

The fourth narrative form is the pilgrimage. In a way, the pilgrimage is the outing; it's really about spending time with your friends and having a good time, with shopping as the context. It's similar to the idea of a group of people at your home watching a football game—there's as much attention to each other as there is to the game. In this way, shopping is something that can done again and again, in much the same way that people might watch the same type of sporting event each week.

Each of these ecologies suggests different design constraints. For example, maintenance shopping should require the absolute minimum effort on the consumer's part. Fast, easy, efficient, effective, few—if any—bells and whistles. In contrast, a business that falls within the pilgrimage form would need to create a context, a reason, for others to gather, such that the commerce experience is almost secondary to the social elements of the event. Being able to make a purchase only when there's a touchdown during a football game is much more pilgrimage-like, in that the primary reason for gathering is to watch football and not to buy the item. It is, thus, important to know what kind of shopping behavior (maintenance, consumption, provisional, pilgrimage) your product or service implicates; or what kind of shopping behavior you wish to enable.

Consider this design example: Household food acquisition in the US appears well placed in the "provisioning" commerce ecology. At the great risk of oversimplification, and certainly relative to Italian households, food is more about sustenance than about experience. Just consider "fast-food" restaurants, microwave burritos, disposable table settings, prepared foods, drive-through cof-

6. This shopping form was first articulated by Daniel Miller in *A Theory of Shopping* (Ithaca, NY: Cornell University Press, 1998) on the basis of research conducted in the UK in the early 1990s. Provisional shopping also includes the likelihood of a small "gift" for the shopper—for example, a candy bar consumed in the car on the way home from grocery shopping.

fee shops, and cupholders in automobiles. It's also interesting to watch the nascent on-line grocery industry, where opportunity is evident, given the right business model and implementation of the right set of shopping characteristics, to support a different form of provisioning. In Italy, on the other hand, it appears evident to us that on-line grocery shopping simply seems inappropriate, at least for the part of Italy that we were visiting. The relatively complex and meaningful inter-relationships of time, space, and social context relative to food provisioning would not appear to welcome a Peapod or other "disinterested" third party.

Conclusions

Managing this type of ethnographic work requires an understanding that there are no cookie-cutter recipes for getting results. One cannot predict the "deliverable" before it happens; this is the work of discovery, regardless of product, service, or country. Moreover, ethnographic design methods change depending on the question or problem and the country or region. Not all studies require the same set of methods and practices; indeed, not all studies require the same intensity. As design ethnographers, perhaps even more so than our academic colleagues, we constantly experiment with new methods and practices. In fact, you must experiment if you are to get at the issues relevant to your particular company or client.

Our industry context also compels us to experiment with ways of representing our work to others, including our product-oriented colleagues. The challenge in working with designers, engineers, and product managers is finding ways to present the data that makes sense to them, a way that conveys the richness and texture of day-to-day interactions and cultural fragments as they are relevant to design. The challenge of presenting data is not new to anthropologists. Historically, however, we produced monographs and taught students. Now we are engaged in a new sort of production. Physical products or prototypes, performances of the findings (in theatrical or "museum-like" installations), and content sketches might just as easily be outcomes of our research, as are ethnographic insights and cultural descriptions delivered via CD-ROM or film or text.

Once we see how something exists, how it is embedded in a context of relationships and associations, we begin to understand it. A table might be an eating surface, or it might be the social center of the home. A refrigerator may be a message center for a family in Westminster, Colorado, but it is only a cooling device on a Navajo reservation—one that is lucky enough to have electricity on a regular basis. A large TV may be a status symbol in the Azores—or "wallpaper" in Culver City. Our sense of the global comes from making connections among all the different sites we study. What we have learned in Italy, in China, on the Navajo reservation, in Hispanic households in West L.A., in the suburbs of Boston, all goes toward making the connections that teach us about the world. Design ethnography offers a powerful way to examine the circulations of meanings, objects, and identities in diffuse time-space and bring these to fruition, not in new descriptions of localities, but in new objects and services that will make sense in those localities. We still study people. It is their voice, their story, not our own—that we try to tell to marketers, designers, and developers. ♦ (Reprint #99104SAL35)

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Suggested Readings

Miller, Daniel. *A Theory of Shopping*. Ithaca, NY: Cornell University Press, 1998.

Parks, Tim. *Italian Neighbors, or, A Lapsed Anglo-Saxon in Verona*. New York: Grove Weidenfeld, 1992.

Underhill, Paco. *Why We Buy: The Science of Shopping*. New York: Simon & Schuster, 1999.