Design Anthropology Meets Marketing

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Abstract: Since the appearance of "Ethnography in the Field of Design" in *Human Organization* eight years ago (Wasson 2000), anthropological research has increasingly been regarded as an asset to design innovation. Yet, the use of an anthropological approach for the design of things has recently posed a challenge to many current, leading businesses. Anthropological research, with its focus on understanding human behaviour, often does not integrate easily with abstract marketing segmentation models that are based loosely on factors thought to influence consumer purchasing. Many practicing design anthropologists have had to face the challenge individually with their companies and clients of how to make anthropological research results meaningful to marketers and business people. A central goal of this article is to present the groundwork for meeting such a challenge both to those who are working in design anthropology and to those who are building academic programs in applied anthropology with an eye toward making valuable contributions to this area.

Keywords: design and business anthropology, marketing, market ethnography, applied anthropology

Résumé : Depuis la parution de l'article « Ethnography in the Field of Design » dans *Human Organization* il y a huit ans (Wasson 2000), on a de plus en plus considéré la recherche anthropologique comme un apport valable pour l'innovation en matière de design. Pourtant, le recours à l'approche anthropologique pour le design des objets a commencé récemment à poser un défi à plusieurs grandes entreprises en position dominante dans leurs marchés respectifs. La recherche anthropologique, avec son objectif de comprendre le comportement humain, a souvent de la difficulté à s'intégrer dans des modèles abstraits de segmentation aux fins de marketing, qui s'appuient sans beaucoup de rigueur sur des facteurs qu'on croit susceptibles d'influencer les achats des consommateurs. Plusieurs anthropologues du design en exercice ont eu à faire face individuellement aux défis posés par leurs entreprises et clients lorsque se pose la question de rendre les résultats de recherches anthropologiques significatifs pour les gens d'affaires et de marketing. Un des objectifs centraux de cet article est d'établir des fondations en vue de répondre à ce défi, pour les anthropologues actifs dans le domaine du design et pour ceux qui construisent des programmes académiques en anthropologie appliquée avec la visée de produire des contributions valables dans ce domaine.

Mots-clés : anthropologie du design et des affaires, marketing, ethnographie des marchés, anthropologie appliquée

Design Anthropology in Context

Over the past several decades, there has been a growing interest in what has become known as "design anthropology"—the use of anthropological method and theory in the field of design research and the making of things (Blomberg et al. 1993; Blomberg et al. 2002; Button 2000; Buur and Sitorus 2007; Cohen 2005; Grudin and Grinter 1994; Jordan 2003; Kingery 2001; Louridas 1999; Pfaffenberger 1992; Plowman 2003, 2005; Schiffer 2001; Tunstall 2008; Wasson 2000). Anthropological research provides a superb foundation for investigating the role of technology in society, and as such, it constitutes a valuable component of design research.

Design anthropology itself emerged over the past few decades as an innovative subfield of applied anthropology, referring to what W. David Kingery (2001) once described as anthropology's role in visualizing technological change as part of the design process, and to what Christina Wasson (2000) described as the role of ethnography in the field of design. It is a primary subject area of business anthropology with deep roots in design innovation (Jordan 2003; Wasson 2000), and it ties to themes in the design literature that had appeared since the early 1990s (Blomberg et al. 1993; Blomberg et al. 2002; Collins 2003; Julier 2000; Katz 1997, 2006; Louridas 1999; Pfaffenberger 1992; Schuler and Namioka 1993). According to these authors, design anthropology plays a valuable role in the innovation of things precisely because it probes the social and cultural context of how they work, for whom, when and why. It helps designers understand the underlying motivations that govern how people use technology and the shape of technological innovation (Tunstall 2008).

In recent years, design anthropologists have been employed in the design and making of things, most commonly in projects dealing with what designers call divergence and convergence—the understanding of new problem space and the prototyping of improved design solutions respectively. Job postings for design anthropologists, many

of which call for expertise in human-computer interaction, industrial and product design, usability studies, instructional design and software design, are themselves quite revealing. While these terms are less descriptive of the design process per se, they indicate that a prime area of current employment lies in the development and refinement of new technologies, for example, crafting web utilities and digital interfaces from everything from music players to electronic newspapers (Callahan 2006; Ito 1996; Marcus 2005; Tunstall 2008). Not surprisingly, Microsoft, AT&T and MSN have all taken lead positions in this area of late, employing full time design anthropologists as a part of their overall research team. But design anthropologists have also been employed for many years in the study of non-digital things, helping businesses understand a wide range of consumer and user behaviours (Plowman 2003; Sunderland and Denny 2007). For those who have been calling for an anthropology of technology, this has been a welcome and promising trend (Pfaffenberger 1992; Schiffer 2001).

Design anthropologists have also been pushing the envelope recently on design theory itself. Notably, they have challenged the view that design anthropology is merely an avenue toward accessing user opinions and ethnographic insight and have positioned the field as an essential component of design strategy, design thinking and what may generally be referred to as design theory. University faculties that have played (and continue to play) an important role in building the theoretical foundation of design anthropology include, inter alia, the Mads Clausen Institute, part of the Faculty of Engineering at the University of Southern Denmark, the Institute for Information Technology and Culture at Wayne State University, the Center for Ethnography at the University of California, Irvine and the Anthropology Department at the University of Northern Texas. Faculty members at these institutions, and elsewhere, have been active in promoting the role of contemporary anthropology in modern society, and specifically building a role for design anthropology. Together, they have built the view that contemporary anthropology is a means of contributing valued, provocative insight in the theoretical realm of design, and not merely a means of collecting ethnographic data for designers. Similar points have been raised by a number of anthropologists elsewhere as well, much of which has been published as part of the Ethnographic Praxis in Industry Conference Proceedings from 2005 on (see inter alia, Anderson-Kempe 2007; Baba and Pawlowski 2001; Bell et al. 2006; Cohen 2005; Pierson and Lieven 2005; Plowman 2005; Zafiroglu and Asokan 2006). As anthropologists bring a greater theoretical understanding to the context of design, technology has come to be understood in a broader anthropological context—one that includes the study of cultural change, community, diaspora, globalization, social networking, race, poverty, gender and activism. Of particular importance is the emerging view that design anthropology constitutes more than simply a series of methodological steps or simply the use of ethnographic methods to gather observational data. Current proponents of design anthropology point to anthropological theory and its relationship to social and cultural theory in particular. They point to anthropological work as providing an interpretative framework for assessing the role of technology in society, where interpretations of modernity and morality affect how things function in an ever evolving social context (Katz 1997, 2006; Plowman 2005; Schiffer 2001).

Overall, developments in design anthropology draw support from other trends in anthropology, as well as those in marketing, where related research has proposed comparable ideas within separate theoretical spheres. In terms of anthropology, such research has included the study of things in their social context (Appadurai 1986a, 1986b, 1991), and a growing interest in the study of technology as a component of consumer research, globalization and media communications (Arnould 1998; Ferguson 1988; Ginsburg et al. 2002; Jordan 2003; Miller 1987, 1995; Ogburn 1997; Pfaffenberger 1992; Rowntree et al. 2007; Schwimmer 1996; Sunderland and Denny 2007; Wilson and Peterson 2002). From the standpoint of business, similar works have focused on market ethnography, which has positioned ethnography as an excellent approach to understanding products within a consumer landscape (Christensen 1997; Christensen and Raynor 2003; Christensen et al. 2007; Elliot and Jankel-Elliot 2003; Mariampolski 2006; Salvador et al. 1999; Vinck 2003).

In addition, over the past 20 years there has been a major business contribution to the study of design, known as *persona research* (Barlow-Busch 2006; Cooper 1999; Cooper et al. 2007; Manning 2004; Pruitt and Adlin 2006). This contribution underscores the importance of ethnography for revealing motivational behaviours, and promotes a specific set of methods for design research. Most prominent is the use of fictional, representational characters—personas—for sharing analytical results (Cooper 1999; Cooper et al. 2007). This trend has also lent support to the field of design anthropology, where persona research can be included as part of an overall approach and where the delivery of ethnographic results to businesses is a primary goal.

Despite the importance of these trends, a growing gap has emerged in recent years where a number of

businesses have either failed to undertake anthropological study or have failed to act on anthropological findings and recommendations as part of their design research. This topic is the central theme of this paper. How can an anthropological approach be ignored given its prominence and success?

One primary reason, which I examine below, is the role marketers have come to play in the overall design process. Today, marketers have a strong voice in shaping innovation and they often play a lead role throughout all stages of research and subsequent marketing efforts. Hence there has been a growing need for design anthropologists to work effectively with marketers in the identification and definition of product space.

Design anthropology faces a critical challenge today. There is a need to develop appropriate theory and methodological approaches that can facilitate the integration of anthropological research with modern design strategy. Furthermore, there is a need to develop means of communication with marketers—particularly in terms of how anthropological studies can intersect with market segmentation models and standard business approaches.

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> The [web] program is easy to use...but I wish it were smarter. For example, I sometimes need to go back to what I had last week ... or even earlier, and it doesn't do that! [Comment by an end user about a specific web-based utility]
>
> I wish there were a way to [download and] save a phone message. My nephew died...had a car accident a few days later, you know ... [tearing up]. I kept going in every few days to keep [resave] the message ... up to five days or whatever it was ... but then I forgot. And now it's gone. I wish I had it, so I could just hear his voice again. [Comment by an end user about a phone message of "happy birthday" from her nephew][1]

If there is a central axiom in design theory, it is that great design comes about by designing for people. This may seem self-evident, certainly at first blush, but it is worth reiterating. Great design does not, for example, come about by designing for market segments, demographics, psychographics or any number of tools that are used in the business world to organize business and marketing efforts. Great design only comes about by designing for people and specifically, for those people who are the intended users and beneficiaries of a given thing.

It is therefore not surprising to find that anthropologists are particularly well suited to aiding design research and technological innovation. In the context of design research, anthropologists examine how people use technology to achieve certain ends. They look at how people interface with technology and they collect stories and make observations about how people use objects, tools, technologies and engage in a general struggle with things. Such research can prove vitally important for understanding people's needs and underlying motivations, especially with reference to technology. Ethnography places design anthropologists in a privileged position to gain an unparalleled insight into motivational behaviour and the central issues that constitute design success.

For example, today we are witnessing a revolution in text messaging. What had been a casual usage alongside instant messaging, chat and email has exploded in just a few years. Teens and young adults are texting in huge volumes and 1,000 messages per month is now considered a modest use. Many of these text messages undoubtedly fall under the category that Miller and Slater (2000) label *mundane*. They simply serve to touch base and bolster a relationship. Others would fall under what I call private broadcasting, where status and availability are central themes of the communication. But there are other common uses of texting that quickly move well beyond the mundane. Texting is now used as a common means of getting stories straight (after the fact), of making deals (legal and illegal), of calling up instant parties, of sending notifications, of hooking up, and of receiving various *hidden* communications. Texting has challenged notions of privacy and modernity, and it has especially placed parents and teens (as well as a great many others) in a struggle over what constitutes acceptable and moral behaviour. Understanding the motivations behind texting is one of the key issues that emerges from anthropological research, (for example, the desire for parents to protect their children, the desire for teens to maintain their own identity and privacy, etc). It is this type of struggle that design anthropologists uncover when examining the motivations behind uses of technology.

So why is it that anthropological insights may be ignored by businesses, if such insights are truly beneficial to the making of things and crafting design in general? One answer to this lies in the fact that many business professionals—notably marketers—are much more geared toward dealing with *market segments*, than they are toward dealing with real people. For some, this means that they routinely do not fully grasp why *people* use certain products and services, and cannot really fathom why such items may be flawed or failing in the marketplace. Some find it difficult to move from concepts of *consumer universe* and *market segments* to *people* when making decisions on product development. Moreover, they tend to

confuse features and functions of technology with motivations themselves. Therein lies the problem. Either business professionals need to move away from working with abstractions like market segmentation when considering design, or design anthropologists need to be able to relate real world observations to how business people think. Until then, there will remain an untapped potential for how anthropological insights can contribute real, substantive impacts on design innovation.

Returning to the issue of texting for a moment, how can an anthropological insight on texting change how a technology is perceived or marketed? Let us consider ring tones and text messaging and the idea of marketing a service where personalized ring tones attach to text messages (i.e., a distinctive ring tone will ring depending on who it is from, similar to current options for personalization on incoming calls to cell phones). Specifically, would parents like this function if it were provided to their teens? Would they buy it? Answer: probably not. In my household, my son will often duck a phone call from me when he is out with his friends for a wide variety of reasons, but he will hardly ever fail to answer a text message. He does not perceive texting as invasive or threatening to his privacy, his actions or his modern sense of self identity and image. When texting back, his friends are none the wiser as to whom he is replying, as it could just as easily be another friend. It is a matter of perception and privacy. In comparing notes with others during ethnographic fieldwork, this sort of behaviour appears common. So, now if one were to market a service that would identify me as the sender, would such a service be welcomed? You would find that my son's messaging behaviour might change rather dramatically, as would that of his friends and other teens. Separate ring tones for text messages is likely to be a feature that would be very unpopular with parents (often the paying partner) and would not sell well to them once they realized what it meant.

In design theory, it is generally held that the better you understand the problem needing to be solved, the more likely you are to find the right solution. This is also a central theoretical precept in design anthropology. Understanding how people use things, or how they use a specific thing to solve a specific problem, contributes significantly to design recommendations.

Today, more than ever, there is an attempt to guarantee, as near as possible, that a new product or service will be profitable from the start. Of course, part of the pressure on designers is that they will *get it right* from the beginning, and that any new product or service will have a market potential that promises an excellent return on investment. Hence, there is a need to address marketing concerns virtually hand-in-hand with design innovation and research every step of the way. Design thinking is therefore not very far removed from marketing initiatives and as a result, innovation is often hampered.

It is not uncommon for design anthropologists to come face to face with marketers early on in a project. There is often a need to incorporate marketers into a research approach at the outset, and a need to address central marketing concerns (for example, how many prospective buyers might there be for this product, where might it sell best, to which market segments, etc). These, of course, are important business decisions, but most naturally they sit outside the comfort zone of most design anthropologists.

There are at least two ways to address this situation with positive results. The first is to ask that design anthropologists develop marketing expertise, at least to the point that they can communicate effectively with marketers. The second is that design anthropologists develop tools that are sufficiently robust and theoretically and methodologically sound so as to enable anthropological research to be viewed within a marketing frame of reference. Both of these approaches are touched on in the research examples that follow.

Participatory Design with a Twist

Participatory design is a recognized approach in design research that emerged more than 50 years ago and reached maturity during the 1980s and onwards (Kensing and Blomberg 1998). It derives its name from the inclusion of end users—participants—in the design phase where opinions and feedback provide insight throughout the design process. Goals for this kind of research most often centre on a product's usability, and whether a design will effectively meet the needs of its intended end users. This is a particularly effective strategy for designing small, well-targetted products (for example, digital interfaces of software utilities, specialized equipment, etc).

Design anthropologists over the past decade have played a prominent role in this type of research. Observations of how a thing is used, along with follow-up interviews, have revealed how a design can be improved prior to its initial, formal release or further development. A new twist has been added to this kind of approach, however, over the past several years—namely, a measure of marketability as part of the design research phase itself. The example below is a case in point.

Between 2003 and 2005, I was hired by Eighty20 Group, Inc. to redesign its content management system, a set of web publishing utilities.[2] The company had been competing against a number of larger companies with

very substantial offerings, and it was now facing a critical decision: tailor its software to a specific set of users—develop a niche market offering—or abandon software development altogether. It was hoped that by hiring me, a direction could be found for redesigning the company's software, and that I would be able to identify a profitable niche market.

Of course, there is no manual that sets out just how an anthropologist can go about doing this with any real guarantee of success. Business literature tends to attack the problem from a marketing perspective, and from that standpoint, much depends on the nature of the business idea. Luck is often cited as an added asset for success, if not an actual pre-requisite, along with timing, degree of dedication, availability of capital financing, et cetera. But one pertinent area of business literature that is becoming more and more useful for design anthropology is market ethnography (Mariampolski 2006).[3]

My job was to conduct research that could guide development, both in terms of helping to identify a potential niche market, and also in terms of helping to shape the product to meet the needs of newly identified end users. In evaluating the strengths and weaknesses of Eighty20's software, I met with various stakeholders in the project as part of an initial review. This step included meetings with the senior management team, the sales team, and the product development and design team, as well as others actively involved in maintaining the software. I began by asking for *stories* surrounding the software and its use, as well as the *culture* of the company overall. The telling of these stories painted a picture of the values of the company, and the strength of its offerings. What was needed was a firm direction. Everyone wanted to know who to design for because everyone recognized that once you move beyond the basics, *excellence in software innovation stems from designing with a specific set of users in mind*—a well-established maxim of the design world.

The step of identifying creative opportunities and unique advantages is not an easy one. In the business world, it generally depends on competitive analysis and the experience or connectedness a company may have with a particular business sector. In this instance, probing Eighty20's expertise, and asking its owners and senior management about key experiences, was a critical part of my evaluation. You must first know a company before undertaking market research to guide any product design. In the business world, this is often referred to as "stakeholder interviewing" and information gained from such research is often vital for measuring avenues for success. My interviews established that Eighty20 was primarily in the business of communications and that its owners were dedicated believers in quality education. The company had worked closely with independent schools in the past, with great success, and this emerged as a primary avenue for business development.

It was at this point that ethnographic input became crucial. It would have been risky if Eighty20 had reached any decision in a vacuum without end user input. Such feedback was vital for recognizing design opportunities. I met with Eighty20's clients who had been using the company's software for communications. I asked them why they valued the software, how they found it worked for them, areas they found frustrating and, in general, what they primarily used it for. In addition, I watched them perform a variety of core tasks—both those that they said they did regularly and those that I asked them to do as part of a general usability study. These are typical questions a design anthropologist might ask, but I also included questions that were aimed at measuring marketability, competitiveness and perception of value—participatory design with a twist.

What emerged from this study was the recognition that fundraisers and communication coordinators in independent schools were ideal users of Eighty20's software. They had a keen awareness of how Eighty20's product helped them in their job, and an appreciation of how it made a difference to them professionally.

The solution for Eighty20 was then strikingly simple. Redesign the software to excel at the specific job tasks of professional fundraisers and communication coordinators at independent schools—and rebrand the software with this in mind. I worked closely with four key participants in a complete breakdown of all features and actions of the software, a thorough review of all interfaces and the work flow they enabled, and a testing of the software for its intended end use. Armed with this information, Eighty20 seized a key market opportunity and within a year, the company emerged as a leader in the industry with a focus on communications for independent schools.

The key observation to take away from this is that market analysis often plays a primary role, in conjunction with research, in design. This is especially the case when an existing product needs to go through extensive redesign. Design anthropology can play a key role in this.

Persona Research

Persona research is a recognized best practice in the study of design (Cooper et al. 2007; Manning 2004; Pruitt and Adlin 2006). It is the method of using crafted, fictional biographies—personas—to present results from qualitative, ethnographic research. Personas are textual descriptions that describe behavioural motivations rather than

actual biographies per se. They constitute a valuable research tool specifically because they breathe life into what would otherwise be a set of abstract conceptualizations. They allow design teams to come to grips with ethnographic research in a meaningful way and they facilitate dialogue between designers, programmers, marketers and managers.

Patterning in the qualitative data forms a backdrop for each individual persona—literally giving a face and name to significant ethnographic observations. For example, in a hypothetical case of ethnographic research on TV viewing habits, a persona—Kate, aged 24—may be presented as catching her favourite TV show online every Thursday night and also subsequently buying DVD sets of those very same episodes for subsequent viewing. In this instance, the online viewing is more about staying up with the content of the show while the DVDs are more about the relationship she has with the show and its characters and the ability to watch reruns whenever she wants. The information is used to build Kate's persona profile. It presents the tendency for these two observed media behaviours to form a significant association. Presented in this way, ethnographic motivations that explain observed patterns of behaviour are easily understood, much like developing familiarity with strong, fictional characters. The end result will be a presentation with a photo, name and detailed text that discusses why this persona chooses to behave the way they do (i.e., specific motivations). It is a method of data presentation that is meant to stimulate creative thinking in a decision-making process.

Persona research works best when the range of behaviour itself is well focused and the intended end users of a product are well defined. The tighter the focus and definition, the greater the likelihood that ethnographic observations will be insightful. It helps to have a specific research scope in mind so that ethnographic observations can lead to identifying the *differences that make a difference*—the compelling needs that reverberate in the marketplace and which will make all the difference to the success of product (or service) design.

The underlying foundation of persona research is ethnography, which means that both the strengths and weaknesses of qualitative research accompany this kind of study. Persona research has recently come under criticism, not so much for its failure to contribute insight but for its lack of quantitative rigour (Chapman and Milham 2006). It is important to keep in mind that all qualitative research can be strengthened by a component of quantitative measure and that anthropological research embraces both means of study.

In 2005, I was hired as a design anthropologist by Quarry Integrated Communications, who were under contract with a leading telephony firm. Specifically, I was asked to examine the realm of messaging (as in message services, not text messaging), particularly as it pertained to home telephony. The company was on board with the idea that an ethnographic approach would reveal key insights into the marketplace and it was also hoping that the approach known as persona research would facilitate communication among their design team, managers and marketers in the design of a new service offering.

The central aim of the research was to uncover key motivations that explain messaging behaviours. Hence, in this project, trying to understand *why* someone might choose a network messaging service, a home messaging machine or none of the above, was an important point. My goal was to gain insight into both landline and wireless telephony, and to distil the motivations that governed why people chose specific messaging behaviours.

A total of 64 home interviews were conducted. The presence or absence of broadband connectivity was anticipated to be of some importance to end results, as was the presence of a land line, mobile phone or both, and the overall size of the household. Recruitment took these matters into account directly. In addition, in an effort to build as broad a representation as possible, recruitment also attempted to include, to the extent possible, a wide variety of other factors, such as different community types, age groups, family types and ethnic backgrounds (see Figure 1).

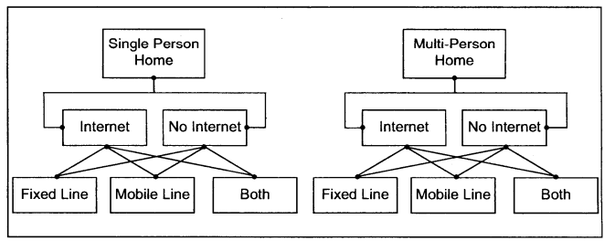

Figure 1: Recruitment Matrix for Telephony Messaging Study

During the interviews, questions were asked concerning messaging activities and what the person valued most about messaging per se: the checking and forwarding of messages, the ability to access them easily from a variety of devices, scanning calls, preferred ways of messaging, et cetera. As part of our research, we also observed what happened when we unsuspectingly rang the participant's phone during our interview. Was the call screened, ducked, picked up or ignored and let go to a message

machine? This was used to verify stated behaviours and preferences.

This research formed the basis for identifying dimensions—types of behaviour expressed as a range, such as the desire to screen phone calls or the desire to check messages routinely throughout the day, et cetera. Individuals would score differently on each of these dimensions, and as is typical of methods in persona research, each individual interview was plotted on a single relative scale. What was of particular note was that clustering in one dimension often tended to coincide with clustering in another, indicating that motivations in one area were associated with motivations in other areas to some degree. The research revealed key types of telephony users.

The problem at this point was to relate these ethnographic findings to the end client's market segmentation schema. There was a need to understand whether it made business sense to develop a new service for a key set of telephony users. In other words, with the ethnographic analysis in hand, we needed to determine just how many telephony users would be potential customers of a new service if a major investment in product development was to be forthcoming. If one type of user represented 0.1% of the population or 20.0% of the population, this would make a huge difference in terms of the market potential of a new service offering. Such concerns over representation are typical of qualitative research and they argue for the inclusion of a quantitative phase of research and analysis (Bernard 2006; Ireland 2004).

What we devised was a simple and highly effective method for integrating the data in a way that made sense for the end client. We conducted a quantitative survey of each of the client's key market segments, wherein a simple questionnaire would quickly establish what type of telephony user they were. A total of 2,000 surveys were completed as a sample of Canadian consumer households (roughly 0.02%). It was around these motivational insights and quantitative analyses that we focused our report and its key recommendations for telephony service.

Based on our results, we estimated that a significant market existed for a new messaging service—at least sufficient to proceed towards further design considerations and development of a prototype. We note that ethnographic results alone would have been insufficient to persuade our client to make a major investment; a business case had to be presented that included quantitative analysis. These results paved the way for the eventual release of a new messaging service, which was based, in part, on our results and recommendations. While the full results of the work remain confidential, both our client and its competitors have since released products that reflect the motivations and types of telephony users we found: Bell Canada's Call Answer Message Manager™, Rogers' Home and Away Voicemail™, Aliant's Call Answer/Message Manager™, and AT&T's Unified Messaging™.

Design Anthropology: Meeting Today's Challenge

Design anthropologists and designers strongly agree that design strategy benefits from a modern ethnographic approach (Mariampolski 2006; Wasson 2000). Participant observation constitutes a fundamental method in this study, especially when used to explore how people use things to achieve definable end goals. Indeed, this is a cornerstone of design anthropology. As pointed out by Collins (2003), technology is much more than a mere set of tools; it is a context in which things enable and constrain individual and group behaviours. Design anthropologists and designers have recognized the contribution of anthropological study for a number of years and have come to view ethnographic insight as a valuable, often vital, contribution to design thinking (Katz 1997; Plowman 2003, 2005; Schiffer 2001). Moreover, as stated above, design anthropologists have made significant strides in recent years towards making substantive contributions in the realm of design itself, where anthropological theory has led to greater awareness in design innovation.

The challenge to design anthropology is not in terms of its ethnographic insight; the challenge lies in how such insight best fits with business and marketing approaches in the study of design and in how it best affects making sound business decisions.

Businesses typically employ standard marketing procedures, such as segmentation models, to categorize customers. These are based on demographics, psychographics, geography, employment, education and other similar proxy data (Leeflang et al. 2000; McDonald and Dunbar 2004; Wedel and Kamakura 1999). Such models are based on dividing a market into individual segments, which are defined as mutually exclusive groups of people sharing similarities in their background and composition *and their product needs*. Considerable effort is made to understand the existing customer base, especially which *types* of customers are most likely to buy products and services in the future. Segmentation models aim to understand current buying trends (i.e., the *status quo* of a company's customer base) in order to predict future trends and success—the who, what, when and where of future sales.

Yet, using standard segmentation models to predict consumer behaviour can be a very dicey business. One major problem with any standard segmentation model is that it only works on a gross level of *how many*, for

example, one in 75 of this market segment will likely buy your product or service. It tells a company little about *why* someone is likely to value a product or service. Drawing insight from Miller (1987), Christensen et al. (2007), and Mariampolski (2006), it would be incorrect to assume that what a company thinks forms a value is the same as what its customers perceive. Analyses drawn from standard segmentation models yield predictive numbers but they leave marketers in the dark about just what is going on in the market and why customers are buying—or perhaps more urgently, not buying—a particular product or offering.

Current trends in marketing are looking at ways in which ethnographic research can dovetail with more traditional marketing and segmentation schemes. The benefit of such an approach is that it offers the potential to understand consumer behaviours and motivations, in particular as they pertain to a given product or service. It offers insight on *how* and *why* customers value a particular thing. Such information is valuable on two fronts: it helps a company know if a product design is on the mark or if changes are needed, and it helps them to know best how to communicate with customers in a manner that will convey value.

Not infrequently, business embraces ethnography as a way to gain insight in the marketplace. Often, they acknowledge the professionalism of the approach and the validity of the results. The problem is not the insight itself, which seems quite straightforward, but more about just how pressing a demand it reveals. How many people will want to use a specific product or service? How marketable is a given idea or technology?

As design anthropologists, we must recognize that market segmentation is the primary marketing tool and that our results need to speak to business strategy. As mentioned in the cases above, market approaches and market segmentation are vital considerations for making design decisions. This may be as simple as needing to validate ethnographic observations via a small, well-targetted quantitative survey, or as complex as integrating ethnographic analyses within more complicated design modelling exercises. We need a means by which we can relate our real world results to how marketers dissect and comprehend a consumer universe. Specifically, we need to develop tools that will enable us to relate anthropological insights into human behaviour to the business world of market segmentation. If we do develop such tools, there is the very real possibility that design anthropology itself will flourish.

As design anthropology continues to grow, it must benefit from research that attempts to bridge the study of design with growing trends in business theory, as well as anthropological approaches to social and cultural theory. It is only when design anthropology reaches the point of leveraging its methods for understanding human behaviour that it will reach its full potential as a partner in the world of design.

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Notes

1 These two quotes were collected in the course of my fieldwork over the past eight years. I selected them primarily because they constitute excellent examples of how stories can reveal flawed design.

2 Technically, my title was Vice President. As it was a small company, I also managed its creative, web design and programming staff. It was only later that I realized that my success in technology design had to do with my training in anthropology.

3 I wish to acknowledge the entirety of the team in helping uncover and set Eighty20's direction, especially Karim Ismail, President, Narmin Ismail, Vice President, Galib Riyani, Vice President, Phil Lameira, Web Programmer, and David Zhu Wei, Programmer and Database Developer.

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