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Final Paper w/Annotated Bibliographies

Design Anthropology – Dr. Christina Wasson, University of North Texas

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Design anthropology is a relatively new field of study that is heavily rooted in anthropology but also draws from, and works with, other disciplines, namely designers. The scope of this essay will be to present a short overview of design anthropology, the commonly used methods for data collection, common theories of approach and theories of analysis, and the ways in which anthropological methods and approaches benefit the design process. I will also explore the methods and approaches used in design anthropology that I find the most attractive. This essay is based off of thirty-six articles and chapters that I read during the summer of 2007 for an “Introduction to Design Anthropology” course; I have attached the annotated bibliographies for each article and chapter to the end of this essay and included footnotes that reference the readers to the bibliographies can that explain a topic further.

Overview of Design Anthropology

I find summarizing design anthropology to be somewhat difficult because it is a complex and diverse field of study. In short, it can be said to be the use of anthropological methodologies and theories in the data collection and analysis of a design process. The products of the design process can be either an improvement upon an existing, or creation of a new, program or material product¹. But this summary does not capture the breadth of design anthropology, nor does it account for the actual methodologies or theories used. Salvador, Bell, and Anderson (1999) claim that the use of ethnography, a commonly used anthropological method, in design can help

¹ For articles & chapters that have case studies and/or talk about the product of the research see: Woodruff & Aoki (2004), Blomberg, Suchman, & Trigg (1996), Jones (2006), Miller (1998), Sacher (2002), Salvador, Bell, & Anderson (1999), Silverman (1998), and Kelley (2005)

to bridge the consumers with the designers, they suggest that designers, even if they live the community of interest, are not the same at work as they are at home and thus loose focus of the consumer.

There are common methods and theories in design anthropology, which will be covered below, but there are not rules determining which ones are to be used and when they are applicable. Adding to the difficult task of summarizing is the wide variety of approaches to research taken by design anthropologists- some chose to work with designers throughout the entire research process or some for half, others work with users for half of the process or others the entire process, and yet others work with both designers and users for some or all of the process. The involvement of the designers, users, and other stakeholders in the research process determines parts of the research agenda and the research agenda determines what roles the stakeholders will play.

While the methods, approaches and end products vary in design anthropology, one thing is certain- design anthropology is *applied*. The data collected through the use of anthropological methods and then analyzed with anthropological and non-anthropological theories is applied to the final product. The final design product, be it a software program used by physicists or a door leading to a bank, is informed by the data gathered during research. However, as it to be expected, *how much* influence the data actually have in the final development of the product varies from project to project and is determined by the role of the researcher in the design process, if a researcher is not involved past the data collection phase than the data might have less influence on the end product.

Design anthropology is gaining in popularity among large and small companies; it has become particularly popular in the years of 1995-2005 (Sunderland & Denny 2007). Some of

the better-known companies that have used (a form of) design anthropology in their product development are: Xerox Palo Alto Research Center (PARC)², Intel³, and IDEO⁴.

Methods of Design Anthropology

One of the most important aspects of any research project in the social sciences in the data collection phase because the data will be used throughout the entire project. It is important to collect valid and reliable data to ensure that the analysis can result in accurate statements- or in the case of design anthropology, accurate design recommendations. The methodologies used in design anthropology are commonly referred to as “ethnography”. Ethnography is an anthropological methodology that typically involves extended stays in the field and incorporates a variety of data collection techniques in order to truly “understand” the people in the community being studied. . Ireland describes six different types of ethnography used in design research; photo ethnography, field ethnography, ethnofuturism, “real world”, personas, and digital ethnography (2003:26-27). Each one has a focus on contextualizing the user in a different light and thus uses different methods to do so. Ireland’s six types of ethnography show how much a traditional anthropological approach has been adapted for the business world.

It appears to be common for design anthropologists to use a triangulation (or better) of methods for data collection. Some of the factors that can influence the decision of which methods to use are the researchers’ preferences, availability of money for resources, time constraints, and focus of research. Plowman (2003) suggests that the anthropological methods used in the “business world” are abbreviated versions of their academic counterparts but suggests that with enough training and experience the business world’s methods are just as respectable.

² see: Wasson (2000), Blomberg, Suchman & Trigg (1993)

³ see: Salvador, Bell & Anderson (1999)

⁴ see: Kelley (2005)

Some of the methods that researchers have to choose from and are applicable to most research agendas are, social mapping, family history, literature reviews, and demography (Salvador, Bell, & Anderson 1999), observation, device logging, semi-structured interviews, and audio recording (Woodruff & Aoki 2004), and conversation analysis, participant observation, video recording, interviews, and photo narratives (Wasson 2000).

Theory in Design Anthropology

In the following section I will present common theories used in design anthropology. I have sorted the theories into three categories; theories of analysis, theories of approach, and theories of approach and analysis. It should be noted that these categories are not commonly used, in fact I've never seen them described as such, rather this is how I categorize the theories for my own understanding. When I refer to "theories of analysis" I am speaking of the more traditional theories that are used to make sense of the data i.e., functionalism. When I say "theories of approach" I am talking about theories that describe how to approach a research project, these theories are really more like paradigms and dictate which methods are to be used in data collection, who is to play what role, and to which situations such should be applied. These theories do not necessarily dictate *how* the data should be analyzed. Such theories do not necessarily suggest *how* data collection should be approached.

Of course there are some theories that suggest both *how* to approach the data collection and the frameworks that should be used for *analysis* of said data. I call these "theories of approach and analysis" but I suppose they could be considered to be paradigms rather than theories. The beautiful thing about all three of the categories is that these are merely *suggestions* for the research methods and analysis- researchers are free to pick and chose the appropriate theories based on their own preferences and the nature of the project.

Theories of analysis are frameworks to examine the data from and are very common in traditional anthropology. I believe that the choice of analysis theories is up to the researcher and/or their team members. It is likely that some frameworks are more appropriate for certain situations though. There are an overwhelming amount of analysis theories that exist within anthropology alone and I haven't heard of any that are unique to design anthropology, so I don't really believe these theories deserve their own section.

Theories of Approach in Design Anthropology

Just like there are many theories of analysis, there are many theories of approach, but I have found there to be some that are more unique to design anthropology than traditional anthropology. I find the theories of approach to be the most important because they really guide *how* to approach a certain situation. This is the process that determines who is involved in what stages of research etc. It's been interesting to learn about the various approaches in design anthropology and to see just how they have been adjusted and altered as new ways are discovered and/or old ways are determined to be non-affective. Since the discipline is young, the development of new approaches seems to be happening very quickly!

Prototyping is mentioned in a couple of our articles and chapters as a way to test products prior to completion. Blomberg, Suchman, and Trigg (1996) used cooperative prototyping, which is meant to give users an active part in the development of the product in every stage, in their work in a law firm. I find cooperative prototyping to be intriguing because of the active role that the user plays in the development. Crabtree (2003) introduced another approach to prototyping, evolutionary prototypes in Cooperative Work. Such prototypes are built from the ground up and are the product of observation of the design space and communication between all stakeholders.

Theories of Analysis & Approach in Design Anthropology

Perhaps the aforementioned categories of theories of analysis and theories of approach are not commonly used because it is complicated to categorize all theories, but this is how I prefer to look at it. I say it's complicated because not all authors thoroughly explain all of the aspects of the theories so I'm not sure what I might not be accounting for, but I also say complicated because sometimes *how* you want to analyze is determined by *what* you analyze which sometimes needs to be collected in certain ways.

My first example of a commonly used theory of analysis and approach in design anthropology is Conversation Analysis (CA). As both Silverman (1998) and Woodruff & Aoki (2004) explain conversation analysis was discovered by Sacks whom wanted a way to study "actual activities", so he created units of conversations to structure the data- with this sequencing of units was better understood and how the units are handled was better understood, and a relationship can then be explored. The only methods that Silverman mentions are audio recording and discourse analysis. According to Woodruff and Aoki, CA has been used in a variety of approaches to design i.e., user experience design and Human-Computer Interaction (HCI). CA is an appropriate method within design research because it brings a focus onto the details of human-machine interaction.

My second example of a theory of approach and analysis is more focused on what roles the various stakeholders take in the entire research process. Wasson's (2002) chapter describes the equal collaboration of researchers and designers in teams at, what was then called, E-Lab, a Chicago-based consulting company. E-Lab was a unique consulting firm in that the main priority was to have an equal investment by researchers, or ethnographers and designers

throughout all phases of a project; project proposal, data collection, data analysis, development of frameworks, general design implications, and specific design recommendations. Of course, particular projects and particular phases of the projects required varying levels of expertise, so there were times when either an ethnographer or a designer took “lead” of the teams that were equally made up of ethnographers and designers. Wasson’s chapter describes how E-Lab maintained their commitment to the equal partnership, how the employees dealt problems within the research teams (in terms of who was to be involved and how), and how the ethnographers and designers learned to accept and incorporate the others’ discipline in the project i.e., designers learned to do participant observation and ethnographers learned to visually represent their findings.

Benefits of Design Anthropology in Design

With the increasing popularity of design anthropology it can be assumed that the methodologies of the discipline are benefiting design, but it is important to note some of the specific ways that design anthropology is beneficial. The use of ethnography by design anthropologists provides ways to truly understand the users, in their environments and in the context that a product will be used. Many ethnographic methodologies provide ways to explore the *actual* activities in a situation in addition to the activities as reported by users. Additionally, anthropologists are trained to enter situations as if they know nothing about it, without preconceived notions, and this often leads to new ideas and discoveries from activities that are taken for granted (Kelley 2005).

Salvador, Bell, and Anderson (1999) state that ethnographically collected data can lead to a better understanding of the target audience, thereby better design recommendations can be made which lead to a better designed product, thus increasing the sales for the company. I think

that Crabtree (2003) does a good job of illustrating *why* ethnography is so important to design; he specifically focuses on work activities. He suggests that in order to fully understand the user one must look at the user in their environment and that systematic ways of investigating this can be developed and employed i.e., computer supported cooperative work (CSCW). He also stresses the importance of bringing the actual work environment i.e., taken-for-granted structure of work activities, to the attention of the designers in order to truly understand the user.

I'm interested in design anthropology because products and programs are going to exist, regardless of any influence of anthropology, but I truly believe that anthropology has a lot to offer in terms of designing *better* products. An interesting aspect is that if you are involved in designing products there will no doubt be grand theories of how the products should be designed, but consumers can choose not to purchase the products. It's an interesting difference between design anthropology in products and anthropology in academia, where sometimes the "studied" cannot voice a disapproval of the research conducted on, or for, them. If you are working on a program for a business or government agency, the users might not have the final word on the adaptation of the program into their environment, so this is why having them involved in the development is absolutely crucial.

Conclusion

Where I Stand as a Budding Design Anthropologist

The thing I find so fascinating about design anthropology is the diversity of it. Practitioners have taken traditional anthropological methods and adapted them to the fast pace of design; a lot of the methodologies are abbreviated versions of their academic counter parts because design does not allow for years and years of fieldwork. Data must be gathered quickly and also analyzed quickly so that the client can produce the product. The flexibility of

anthropological methods and the creativeness of practitioners have lead to a very adaptable way to conduct research, and this research can be conducted to inform the design of a wide range of products. It seems as though if you can obtain an expertise in methodology and theory then you can work in a wide variety of contexts, provided you learn the “language” of the particular discipline.

After reading the articles and chapters for the Introduction to Design Anthropology course I have found some particular methodologies to be particularly interesting and some of the paradigms to be particularly of interest as well. One thing that I have learned is that the methods and approaches used will depend on the research i.e., Computer-Supported Cooperative Work (CSCW) would not applicable to research on informing the design of an advertisement. Furthermore, the resources available will limit the methods that can be used. I have an equal interest in designing programs and products and actually see myself using all of the aforementioned methods- ideally in a triangulation.

In terms of approaches to research, I see the value in many of the approaches and could see myself using more than two, however I do have two preferences. I hope to have a working knowledge of many methods and theories that I can draw from. Most important to me are Participatory Design⁵ and semiotics. I have an extreme interest in using Participatory Design, because this approach gives the user much more power, perhaps equal power, in the design process- the researcher no longer is the voice for the user, the user has an actual voice (Sacher 2002). It seems that there is a trend in design research to focus on the users’ experiences and this is very important to me. The research being conducted to understand/explore the users’ experiences focuses on what users say and do and also what is unspoken. This shift towards

⁵ see: Sacher (2002), Ireland (2003), Blomberg et al (1993), Crabtree (2003), Ehn (1993), and Wasson (2002)

users involvement throughout the entire design process as well as towards understanding the spoken and unspoken aspects of present, past, and future experiences has led to a more collaborative process involving the designers, users, and researchers in all phases. I believe that the focus on experiences during data collection can be greatly benefited from anthropological methodologies because of the discipline's strengths in holistic observation and contextualization and I believe that this focus will lead to more functional designs. I am far more interested in the function of a design than I am in the aesthetic, although ideally there would be a marriage of the two.

Semiotics is also very interesting to me. After having read the articles and chapters for this course I realized that collaborating with both designers and users is crucial in design research and that it's not an easy task, in part because everyone has different ways of communicating their thoughts and different ways of thinking about things. Sacher's chapter (2002) explained the use of semiotics in design projects as a "common ground" for analyzers, who are typically academically minded social scientists, and creators, who are typically designers and developers. Sacher believes that semiotics, which focuses on language, communication, and symbolism, can be used to bridge the gap of understanding that exists between analyzers and creators and also users. I'd like to work with the creators and users in every phase of the research process (read PD) so being able to effectively communicate will be of great importance to me.

For a few years I've felt that inter-disciplinary teamwork was very important, however now I feel it more than ever. There are so many approaches and theories that can be applied to research that it's impossible to be an "expert" in all of them. Design anthropology is no exception, it's crucial for the designers and developers (and in my opinion the users) to be

involved in the research because of what they can add to the team- it's unlikely that an anthropologist could become an expert in design and development (because of the time it would take), so having these experts on the team is a wonderful thing!

Things I Hope to Keep in Mind in Practice

It's easy to look back at all of these articles and chapters and think of all of the methods and approaches I would like to use in research, I think it's going to be hard to actually remember to *use* all of these methods and approaches when I get out into the real world. At times, I can be easily influenced by those around me, i.e., if I am working with designers who do not incorporate users in their research I might lose sight of how important it is to have the user involved in the research process. I am aware of this tendency though, so I hope to use this essay as a way of reminding myself of all of the potential methods and approaches that I can use.

Because I do plan on referring back to this essay as I begin to work in the field, I'd also like to make note of some things I'd like to keep in mind. I had the idea for this section while reading Sunderland and Denny's chapter entitled *Psychology vs. Anthropology* (2003), as the title suggests, this chapter is about what is actually *psychological* in nature and what is actually *anthropological* in nature in terms of ethnographic research being conducted in the field of design. While reading this chapter I realized how easy it could be to focus on aspects that are actually psychological if others around me were asking for those things. I realized that I have to keep in mind to focus on anthropological things.

So future self, other things I'd like for you to remember are: always be reflexive and recognize your own and others' biases, never make assumptions- but do listen to gut instincts, be creative in the methods you use during research, focus on the small details and the taken for granted aspects of situations, and lastly, always keep the user in mind.

Annotated Bibliographies of Course Readings

Arnould, Eric J and Craig J. Thompson

**2005 Consumer Culture Theory (CCT): Twenty Years of Research, *Journal of Consumer Research*.
31(March):868-882.**

Arnould and Thompson's article gives a brief introduction to Consumer Culture Theory (CCT). In short, CCT examines the "sociocultural, experiential, symbolic, and ideological aspects of consumption" and takes cues from "relativism, post-positivism, interpretivism, humanism, naturalism, and postmodernism" (2005:868). CCT examines consumers, marketplace, and culture. The goal of this article is to present four common research domains that are explored by the interdisciplinary CCT using mainly qualitative methods; (1) consumer identity projects, (2) marketplace cultures, (3) the sociohistoric patterning of consumption, and (4) mass-mediated marketplace ideologies and consumers' interpretive strategies (2005:871). The article does provide a description of each approach and the main purpose of them.

This article references an abundance of other works having to do with CCT and thus the reference cited section would make for an excellent resource in and of itself. Also, the article provides a comprehensive table of "examples of consumer culture theory research contexts and their corresponding theoretical interests" that would make for an excellent resource (2005:872).

I began this week's readings with this article and I'll admit that I was initially relatively unexcited about the topic. However, upon reading this article my interest was sparked.

I'm honestly not sure if my thoughts provoked by this article were in-line with CCT, but I did have many. First, I thought about how many high school aged children develop their outward identity through the use of brand-named items- many are walking billboards for various clothing companies. Second, I thought about how the growing popularity of the internet must have added many, many new dimensions to CCT studies, one of which could be social networks.

Which social networks people choose to be active on, how they portray themselves on the internet, and which plug-in applications they use to compliment this image can all be considered a part of users constructing their identity from the available commodities. Danah Boyd recently did an interesting post about the socio-economic environment of Myspace and Facebook, two popular social networking sites (someone posted about it on the design anthropology listserv a few days after Boyd posted it on her blog.)

Last, I thought about myself and my “online self”- and all of the commodities I use that inevitably construct my “online self.” Given that I am an online graduate student, that I do the majority of my socializing on the internet, have an interest in the latest web 2.0 trends, and blog, I have many websites, networks, and applications that I use to maintain my internet self. In fact, I have so many that I just recently began a search for an aggregator where I can house all of my various logins, etc. When a new web 2.0 phenomenon catches on, specifically with the other anthropology bloggers, I am likely to sign up for an account also; I want to see what they are doing and to keep in touch, but ALSO being one of the first people (or at least signing up for an account at some point) appears to add to the authority of a web 2.0’er. I recently signed up for a Twitter account because many of my “online anthropology blogging friends” did- I want to stay up-to-date with what they are doing and I afford them a certain amount of “knowing what’s cool” authority. I think that a fair amount of my online self would be seen as a trendy, up-to-date anthropologist.

Bannon, Liam

1991 From Human Factors to Human Actors: The Role Psychology and Human Computer Interaction Studies in System Design. *In Design at Work: Cooperative Design of Computer System.* Joan Greenbaum and Morten Kyng., eds. Pp. 25-44. Hillsdale: Lawrence Erlbaum Associates.

Bannon suggests that human factors (HF) and ergonomics (sub-fields of psychology) lack the ability to see the people that they design products for in their entirety, but rather just with their interaction with the specific product. To see the person, the user, as a whole i.e., experience, knowledge, environment, values, etc would be to see them as “actors” and to see these people as “actors” one must use a better, more thorough approach than human-computer interaction (HCI) can offer. Apparently it is not allowed for researchers and designers in the field of HCI to interact and observe the population of the client to get an empirically informed idea of what is *actually* needed.

Bannon critiques the term “user” within the field of HF suggesting that HF sees *users* as being naïve and rather simplistic i.e., HF doesn’t account for *user’s*, or rather *actor’s*, goals and knowledge at work. Furthermore, *users* are often thought of as being simple. Bannon suggests that the design of a system should not assume that the user has limited knowledge of both their job and the software, but just the software and that the tendency of *actor’s* to tailor, design, the software to their own needs should be accounted for. HF and ergonomics emerged from a demand to get user’s more, and better, involved the machines that they operate. HCI emerged after HF and ergonomics and was seen as being able to offer a user-friendlier product in the world of humans using computers.

Much like Norman’s chapters, I can see where anthropological methods and approaches can greatly improve what Bannon sees as the problem of HF approaches- anthropology can inform designers of *how* actor’s use the products and how the products need to have the ability to

incorporate unrelated job-specific tasks. Bannon proposes that designers work with user's, or actor's, in *every* stage of the research process.

On page 27 of Bannon's article in the first paragraph of the "Replacing Human Factors with Human Actors" section I was struck by his sentence that explained that the use of terms in a vocabulary by members of the community can explain how they "see" the field and can also serve as barriers (this sentence was complemented by the Mead quote above it). To me, this seemed like a very Sapir-Wharf informed sentence. From this same section, I began to think of Bourdieu's "Production and Reproduction" in terms of how authority is established within a discipline. If members of the design community did not use the jargon of the field, but rather the terms of the population they are designing for, it seems like they would lose authority within the design realm and gain authority in the client population.

Blomberg, Jeanette, Jean Giacomi, Andrea Mosher and Pat Swenton-Wall
1993 Ethnographic Field Methods and Their Relationship to Design. *In* Participatory Design: Principles and Practices. Douglass Schuler and Aki Namioka. eds. Pp. 123-155 Hillsdale: Lawrence Erlbaum Associates.

Blomberg et al.'s chapter focuses on how ethnography can compliment, and perhaps better inform, design research. Ethnographers focus on contextualizing the consumer and the products within the consumer's lives, where as designers more typically focus on "testing out" their products *on* consumers. This chapter suggests that computer support for cooperative work (CSCW) and the field's newly created demand for designing systems that *support* human activities may have increased demand for, and thus made popular, the use of ethnography in design. Blomberg et al. suggest some "guiding principles" of ethnography in the field of design. First, there is "natural setting" which is fieldwork and learning about the unknown through experiencing it, i.e., participant observation. Second, is "holism" which is a focus on contextualizing behavior/life within its surroundings, i.e., not removing the behavior from its

environment to observe it. Third, is “descriptive” which is a method of describing how behaviors *actually* occur versus expected behavior and reported behavior. Last, is “members’ point-of-view” which is concerned with capturing a more emic perspective of behavior.

Much like Salvador et al, the authors suggest there is no *set* toolkit for ethnography in design, but the authors do suggest some commonly used methods. First there is “observation” and “participant observation”, both serve to contextualize and understand actual behaviors. The authors provide some information about *when, why, what, and how* to observe and suggest field notes and/or videotaped notes. In order to capture the members’ point-of-view, observation can be informed by interviews. Blomberg et al.’s suggestions for interviews do not vary much from the traditional interview style of anthropologists. Salvador et al. provide much information on establishing rapport and interviewing in short-term fieldwork scenarios (which are more likely to occur in design ethnography). Lastly, this chapter suggests the use of videotaping to compliment field notes and to capture data for analysis. Videotaping offers a more accurate way of recording what happens in the field.

The chapter explores the question of “who does the design anthropologist ‘work’ for?” and suggests that it be the end-user since that is the population that will have to accept (or not) the products that have been informed by ethnography. This no doubt raises an important dilemma that is faced by many private sector anthropologists. The authors do not offer compelling evidence to support the practicality of their claim that the end-user should be the primary client.

Much like Salvador et al, Wasson, and Norman (to an extent) this chapter suggests that ethnography can inform design by contextualizing the user, informing the designer of the user’s world, finding uses/contexts for technology in the user’s world, and opening a dialogue between

consumer and designer. This chapter examines ways in which the dialogue can be established; ethnographers gather data and designers analyze and apply it, teams of ethnographers and designers work in the field, and teams of ethnographers, designers and users can collaborate to co-design the product. Some approaches that can be used in the aforementioned teams can be customer surveys, operability assessments, focus groups and field trips; the authors suggest that same approaches are more appropriate in different stages of research.

There is a short case study at the end of the chapter called the Participatory Design (PD) Project. The authors conducted the PD Project and its goal was to understand human activity and technology (user work practices, incorporating that knowledge into design and lessons learned into product development).

Blomberg, Jeanette, Lucy Suchman and Randall H. Trigg
1996. Reflections on a work-oriented design project. *Human-Computer Interaction*
11(3) 237-265.

The authors Jeanette Blomberg an anthropologist, Lucy Suchman an anthropologist, and Randall Trigg a computer scientist have interests in work-oriented design, participatory design (PD), and cooperative prototyping respectively. These three worked together on two projects in a Silicon Valley based law firm using a participatory design approach and developing case-based prototypes to design more efficient work practices for working document collections. It appears that the researchers, whom work for Palo Alto Research Center (PARC), chose the law firm based on "... the forms of work that we expected to find there and partly by the apparent likelihood of a fit between the work and the technologies that we were interested in developing" (1996:242). The law firm did not seek out the services of PARC, rather PARC sought out the work environment of the law firm. PARC provided the funding and researchers and the law firm

funded the time of their employees, thus PARC was able to offer insight into the law office's work practices but did not promise a "final product" at the end of the project.

The focus of the research at the law firm was on two aspects within the firm. The first was on "M's" form file, which is a large collection of papers that the lawyers refer to based on the task at hand i.e., drafting a new document. M apparently had a rather complex and organized way to manage his paper form file. The second focus was on the document production of the litigation support in the firm. During the data collection aspect of the project the researchers left a video camera with M and asked him to record himself any time that he referenced his form file. This video served as a way to watch him working, but also as a way for him to communicate to the researchers about his working with the file. The researchers also recorded interviews and took observation notes.

An integral part of the team's research was to collaborate with technology designers and developers at PARC and the worksite participants- the authors explain that this was not an easy task and share the ways in which it worked and did not work. Another aspect of the research that was very important was the development of case-based prototypes that were specific to the law firm's work practices and ever changing. Furthermore, the researchers used cooperative prototyping, which is meant to give users an active part in the development of the product in every stage. In the conclusion (pp. 256-261) the researchers make a good argument in support of using such approach to prototypes.

An interesting part of this article was how and why the law firm was chosen. PARC seeking out the law firm and providing their services for free in exchange for the "data" that was collected is a unique approach to finding a client. Also, PARC funded the entire project, another unique aspect of this particular project. I think that it's interesting and mutually beneficial for

both PARC and the law firm. In the conclusion of the article (pp 256-261) the researchers explain how they felt that the data and insights made from work at the law firm could be generalized to the broader activity of working document collections. At first I was skeptical of these somewhat bold conclusions because the law firm is not a representative sample- can you be sure that the practices there are similar to others? After having read what the researchers were concluding to be generalized practices based off their data, it seems as though it could valid, maybe.

Blomberg, Suchman, and Trigg used the participatory design approach in this project and it appears to be fairly popular in ethnographically informed design research. It is an approach that I am very interested in because of the potential value added through the involvement of the many stakeholders at all stages of development. It does seem that having the different groups involved, “analysts”, “creators”, and users, if you will, in the research will create some friction at times because of the various approaches the different groups use and also through the different languages used by the groups. Another aspect of this particular project that I liked was the cooperative and case-based prototypes, which seem to demand the use of PD. Crabtree (2003) also references the use of cooperative prototyping.

Crabtree, Andy

2003a The Motivation for Ethnography in Design. *In Designing Collaborative Systems: A Practical Guide to Ethnography.* Ch 1 Pp. 3-39. London: Springer.

In this chapter Crabtree explores the field of design’s answers to the question of the “requirements problem” and proposes that ethnography was first introduced into the field to help answer these problems. The requirements problem is that of “what to build” and considers the “design space,” many things are considered whilst exploring this topic, namely, exceeding predecessors, all stakeholders and their use for the product, and how to compromise to a product

that meets all of these needs. Crabtree defines “design space” as “...Organization of Work- the institution, company, factory, department, office, etc. or family of collaborative activities which a system is being design for” (2003:3). Crabtree explains that designers have sought for a systematic way to approaching and answering the requirements problem.

According to Crabtree various paradigms have emerged in the field design in attempts to provide a systematic way of exploring the requirements problem. He explains that the focus has become less on a product-orientated (software only) one and more towards a process-orientated (software and design space) one and that Human-Computer Interaction (HCI) is a paradigm that is more process-orientated than its predecessors. HCI works towards developing an interface by which the user can *communicate* with the computer and provides a scientific way for doing so. Crabtree explains HCI and the mapping used in great detail and references Norman (1988) often. However, Crabtree’s goal in explaining HCI is to explain where it fails and this is where he references Bannon’s “human actors” and others’ that have remarked of HCI’s shortcomings in understanding the true role of the user. Much like the lack of focus on the actual activities within the workplace, Crabtree suggests that Organizational theory also takes too many cues from cognitive psychology.

Crabtree moves on to explore the reconceptualizing of the user, work done by Grint and Woolgar (1997) and expanding upon by Sharrock and Anderson (1994) (Crabtree speaks more of the later.) The aforementioned researchers found, through empirical research, that (some) designers define the users through a stock database of “types” of users that is common to the particular business and/or is the product of societal construction i.e., duties of secretaries, policemen, etc. hereby the focus is on the generic group rather than individual. This allows for

the designer to better predict the needs of the stakeholders in what Crabtree describes as a “commonsense” use.

After the user has been reconceptualized from what HCI had defined, the interface must be done also. Crabtree calls on the work of Bowers and Rodden (1993) whom suggest that the users’ should be observed in the workplace to see *how* they interact with the computer and what other factors i.e., previous knowledge, may influence it- that is to say, find out where the problem lays rather than assuming that the interface is the pivotal point of interaction (like HCI).

Lastly, Crabtree turns toward Bannon again and suggests that in order to fully understand the user one must look at the user in their environment and that systematic ways of investigating this can be developed and employed i.e., computer supported cooperative work (CSCW). The last part of the chapter explores the importance of bringing the actual work environment i.e., taken-for-granted structure of work activities, to the attention of the designers in order to truly understand the user.

Crabtree, Andy

2003b Ethnography: An Informal Mode of Description and Analysis. *In Designing Collaborative Systems: A Practical Guide to Ethnography. Ch 2 Sec 1 Pp. 47-57. London: Springer.*

In chapter two, Crabtree continues his critique of the shortcomings of HCI, but further explains that the main point of failure is the focus in analysis. According to Crabtree, the focus on a technology-driven approach is the failure of HCI. HCI, as well as Organizational theory and others, have strong roots in cognitive psychology and it is these roots that Crabtree seems to be pointing out as the reason for the approaches not working in system design.

Enter ethnography. The focus on a more “real world account” gathered through ethnography can lead to a better understanding and more thorough account of the workplace. Ethnography, unlike HCI, etc., does not claim to be a scientific method and is more of an

interpretive approach- the focus is on what is actually happening and does not take for granted the unspoken interactions and daily routines in the workplace. Crabtree calls for all stakeholders to be involved in the development of focus within the ethnography and offers many different data collection techniques that can be employed- however; none of them are original to our readings this semester. The material collected in the ethnography needs to be turned into data and ethnographic accounts of activities, etc. can be used to support findings.

I enjoyed this chapter because Crabtree's writings kept provoking thoughts with me; if the scientific method is not to be used the method must be *rigorous*, CSCW appears to be a very pragmatic approach, a PAR style of approach is needed to guide the data collection, etc. Every time I had one of these thoughts it seemed like Crabtree addressed it within the next few paragraphs.

I felt like Crabtree made some strong arguments for the use of ethnography in CSCW, however, I did not find any of his points to be unique or groundbreaking- I felt like Crabtree was making a generic argument, one that has been used before, for the use of ethnography and did not offer any new insights into methodologies either.

Crabtree, Andy

2003c Prototyping Methodology. *In Designing Collaborative Systems: A Practical Guide to Ethnography. Ch 4 Sec 1 Pp. 130-141. London: Springer.*

In the beginning of chapter four Crabtree explores the use of evolutionary prototypes in Cooperative Work. Such prototypes are built from the ground up and are the product of observation of the design space and communication between all stakeholders. Crabtree offers methodologies for prototyping, which are listed on Pp 131-132.

Continuing chapter four Crabtree references Ehn often in talking about the use of "mock-ups" in Participatory Design (PD). Ehn's chapter gives a better explanation of PD, but

Crabtree's chapter does offer a good explanation of incorporating mock-ups into PD. In this approach, mock-ups are used to give users' an opportunity to participate in the design of the technology. The method of designing by doing and the collaboration of designers with users in the mock-up appear to lead to a better understanding between all parties.

PD led to Cooperative Design, which insists that users have a more central role in the design process. Again prototyping can be used and Crabtree suggests that this method of cooperative prototyping will lead to the involvement of all stakeholders in the evolutionary prototyping process- the focus is on how the system will *actually* be used in the workplace.

I feel like I need a little more explanation about the similarities and differences in these approaches to prototyping, but from what I understand thus far the Cooperative Design approach appears to call for the most active participation and collaboration of users and designers in the entire ground-up development of the system and thus is the approach that I like the most.

Design Council

2007 OXO Good Grips. Electronic document, <http://www.designcouncil.org.uk/en/Case-Studies/AllCase-Studies/OXO-Good-Grips/>, accessed June 4, 2007.

This short article explains the inspiration behind the design of OXO Good Grips products. Founder Sam Farber wanted to develop kitchen products that would be accessible to his wife whom had arthritis, but he felt that the well-designed, comfortable products would be beneficial to *all* consumers. Thus in 1989, Farber teamed with a New York-based industrial design firm called Smart Design to develop such products. The OXO brand has developed 500 products and has increased their product line into other realms of household life. OXO is a rather interesting company because their products have made well designed and innovate products a household normative. It appears that OXO's success is because their products fill a

niche but are also appealing to people outside of that niche- the article calls this “universal design”.

Ehn, Pelle

1993 Scandinavian Design: On Participation and Skill. *In Participatory Design: principles and practices.* D. Schuler and Aki Namioka, eds. Pp. 41-78. Hillsdale: Erlbaum.

The first part of Ehn’s chapter lays out, in brief, the history of industrial democracy, or work-oriented design approach, in Scandinavia and calls on two major research projects, “trade unions, industrial democracy, and computers” (DEMOS) and “Training, Technology, and Products from a Quality of Work Perspective” (UTOPIA) to explain the conception, structure, and implementation of such programs. Both projects lead to ideas of what “works” and doesn’t “work” in terms of an industrial democracy. Furthermore, Ehn supports the history by providing notes of influential laws that have been passed in Scandinavia that have supported the democratization of industry.

The goals of industrial democracy are to give power to all parties involved in the workplace and the enrichment of the user’s skills. The former goal is important because it frees employees from total control by the management and gives the workers an opportunity to have a voice in the implementation of new technologies, etc. The later appears to be a result of the former and is important because recognizes that a new technology can provide opportunities for employees to learn new skills, or that employees existing skills can influence which technology is introduced in the workplace. In theory, the results of such democracy will lead to a higher-quality product, higher employee satisfaction, and more efficient production, and thereby increases the bottom line. One way in which the employees’ voices are represented in the process is by unions. Unions serve to represent the employees (non-management) as a whole

and to take some of the power away from the upper-management in the decision process.

However, as Ehn points out, unions do have a hierarchical make-up.

In the projects DEMOS and UTOPIA, Ehn and the other researchers chose to take focus on the unions rather than the upper-management- this reminds me of Laura Nadar's concept of "studying up", Nadar seems to have written about this concept prior to the start of the UTOPIA project, I wonder if they influenced each other? One of the more interesting points in Ehn's chapter was that it appears that the existing skills of employees can influence which new technologies are implemented in a positive way, rather than technology being brought in to automate aspects of the employees' jobs, thereby decreasing their "worth." Another aspect of the article that interested me was that employees, not only are involved in the design and implementation process, but also given information about *all* of the other aspects of the development of the product i.e., factory workers are given knowledge about the other phases of the assembly. It seems that this knowledge would lead to a better understanding of the different department's tasks and therefore a better understanding of the development as a whole.

In reading this chapter I was reminded of Bannon's chapter From Human Factors to Human Actors: The Role Psychology and Human-Computer Interaction Studies in System Design (1991 *in* Design at Work: Cooperative Design of Computer System) in that both are concerned with everyone involved in the design process needs to understand every aspect of the other stages of the process in order to design the best possible product. Overall I liked the Scandinavian approach to participatory design because it empowers all of the involved peoples and recognizes what skills/knowledge each can bring to the process. Ideally, I would like to be involved with a similar approach, but on a much smaller scale than what Ehn describes. I would prefer for, if not all than, most of the people to be directly involved rather than represented by a

few “elected” representatives. I also thought that Bannon’s idea of “actor” versus “factor” echoed what Ehn described about a discovery made in the UTOPIA project- both essentially said that workers’/users’ skills are underestimated and can be more efficient if fully recognized.

Frascara, Jorge

2002 From User-Centered to Participatory Design Approaches. *In Design and the Social Sciences: Making Connections.* Jorge.Frascara, eds. Pp 33-39. London: Taylor and Francis.

Much like Sanders’ does in her chapter, Frascara calls for a collaborative approach to design. Frascara believes that designers, researchers, and users should all participate in the design process. The phrase “design is a problem-oriented, interdisciplinary activity” is repeated several times throughout the chapter. The main difference between the two chapters is the tone and I believe this is the case because Frascara is writing from a designer’s perspective. He calls for a democratization of design but makes clear that he believes designers have ethical obligations that should guide the process. It seems that he is saying that design should be taken seriously, should be beneficial/functional for the public, and thus needs to be contextualized within the culture. Frascara says that the ethical obligation of designers is to include the public in the design and that the designs should be; sustainable, efficient, accountable, serve a public good, and be relevant. He says that all of these goals can be achieved through a collaborative process and that social science methods can be beneficial in understanding the culture in which the designs will be made.

Something about the tone of this article really, really annoyed me- but for the life of me, I can’t place it. Overall, I agree with Frascara in terms of the collaboration and the function of designs. Frascara repeatedly references “ethics” and seems to be saying, in short, that designs need to be responsible and that the users need to have a say. I agree with this also, but he seems to be placing the ethical obligations on the designers. If design is to be a collaborative process

shouldn't all of the involved stakeholders take an equal part in this obligation? Perhaps he is saying that the designers are the obligated because it is unethical to design uninformed objects (the "old" approach to design) and that designers have to realize this and change to a collaborative approach?

Goulding, Christina

2002a Grounded Theory: Evolutionary Developments and Fundamental Processes. In Grounded Theory: A Practical Guide for Management, Business and Market Researchers. Ch 2 Pp 38-54. Thousand Oaks, California: Sage Publications.

In this chapter Goulding introduces grounded theory, which is a qualitative methodology mainly used in sociology and health studies and was developed by Barney Glasser and Anselm Strauss. Goulding reports that grounded theory, in some form or another, is now being used by a multitude of disciplines; psychology, anthropology, social work, education, and management. Glasser and Strauss, both sociologists, first introduced grounded theory in 1967 in a book called *The Discovery of Grounded Theory* and according to Goulding, this book is still the authoritative source for students learning grounded theory.

As is the case with most theories, grounded theory took influence from a preceding theory; symbolic interactionism and obvious cues from ethnography. For data collection in symbolic interactionism, a researcher does fieldwork with the population and interprets the happenings of the community to develop a theory of "...self, language, social setting, and social object" (2002:39). The idea is that humans will learn and use symbols, namely language, and thus the individual's perception of society can be explored using this technique.

Glasser and Strauss wanted to develop a strict, and thus seemingly "scientific," method for collecting qualitative data because qualitative methods were viewed as unscientific during the 1950s and 1960s (the dawn of post-modernism). The grounded theory approach is most often used in areas that have not already been researched or where the existing research is not

exhaustive. Goulding outlines some of the basic guiding principles of grounded theory that are similar to other qualitative methodologies, the first being that the researcher should not do an extensive literature review prior to entering the field in hopes that this will help the researcher to avoid fitting the data into pre-existing theoretical models. Second, any theories that are developed should be constantly re-evaluated and should include the perspectives of the people being studied. Third, any theory should be supported by examples coming from the data. The most important foundation of grounded theory that *differs* from other qualitative methodologies is that the researcher *should not* leave the field until all discoveries have been made, that is to say until nothing new still emerges.

The founders of grounded theory, Glaser and Strauss, took differing stances to the role theory should play in the approach and thus grounded theory is now broken into two different camps; ‘Glaserian’ and ‘Strauss and Corbin.’ According to Goulding, the two depart when “...Glaser, who argues that the theory should only explain the phenomenon under study, and Strauss, who insists on excessive use of coding matrices to conceptualize beyond the immediate field of study” (2002:45). Both Glaser and Strauss do agree upon two different types of theory, substantive and formal. Substantive theories are theories that only explain, or are relevant to, the specific study in which they were developed. On the other hand, formal theories can be used to explain a variety of situations and are not just specific to the study.

I believe that I like the idea of using grounded theory from what I’ve read of it thus far. I’ve found myself to be naturally suspicious of grand theories about culture and thus I like the idea of substantive theories. I do believe that formal theories can be developed, but I’m reluctant to accept them.

The other aspect of grounded theory that I really appreciate is the idea of *not* doing an extensive literature review prior to entering the field. One of the things I've struggle with most while learning theory is the idea that theories become lenses through which you see the world- it seems to me that your theoretical standing can really influence *what* you find. That is to say, that if you are a structuralist, you will manipulate your data within that framework and find things that may not (or may) be there. The idea of disregarding paradigms so that you have a fresh slate to analyze the data with is intriguing and while I believe it would be *very* difficult to do, the data may lead to something entirely different. In fact, this is the very reason why I like the idea of working in interdisciplinary teams- each discipline brings something unique to the group and is bound to find patterns, etc. in the data that others will not because of their guiding paradigms and seemingly limited approach to the analysis.

Goulding, Christina

2002b Getting Started: Data Collection and Sampling. *In* Grounded Theory: A Practical Guide for Management, Business and Market Researchers. Ch 3 Pp. 55-73. Thousand Oaks, California: Sage Publications.

In this chapter, Goulding covers various aspects of the research process in grounded theory. It is important to note the in grounded theory, data collection and analyses are not two separate stages, but rather are both on-going processes. As Goulding notes in chapter two, an extensive literature review is *not* how the research process begins in grounded theory.

According to Jones, the first step in the research process is to find an area of interest and if grounded theory is to be used, it is most often an area that has not been exhaustively studied.

The goal of grounded theory is to develop theories, either substantive or formal.

The second step of grounded theory is to collect data and this should be done using a triangulation of methods. Some of the data collection methods that Goulding mentions as being popular in grounded theory are, life histories, interviews, introspection, observations, memos,

and secondary data. Secondary raw data is data from another research project in a similar area. The benefit of analyzing the data from another project is that a “new set of eyes” might find different patterns than the first. Memos are free-flowing notes that are made by researchers throughout the entire research process, and specifically during data collection. Memos can serve to jog the researcher’s memory when they return to do analysis. Introspection is the continual act of the researcher and participants examining their own thoughts and actions- a way to see if biases are being introduced into the interpretation process.

The third aspect (it seemed like Goulding was setting up steps, but I don’t think she was) of grounded theory is sampling. Theory guides sampling in grounded theory and determines what and how much to sample. As your theories evolve and focus changes, you sample accordingly. I’m a bit confused as to how this sampling method is as throughout and “scientific” as other approaches i.e., quota samplings

Goulding says that grounded theory begins with the researcher picking an area of interest and for the most part, this is how most research projects begin, unless the researcher finds a client and the researcher and client chose the area of interest. I am interested to know to what extent grounded theory is used in Community-Centered Praxis (CCP) or Participatory Action Research (PAR) methods. It seems like grounded theory could really lend itself to the PAR approach and to design ethnography in that neither the researcher nor the client needs to be an expert (or well read) in the area *and* the constant re-evaluation and self-reflection of grounded theory could lead to an open dialogue between researcher and client.

I really like the idea of secondary data for similar reasons as to why I like not conducting literature reviews prior to the start of the research process. Analyzing secondary data gives a

second (or third, or fourth) analyst a chance to look for patterns, etc. in the data that might have been missed by the prior researcher *or* a chance to confirm the findings of the prior researcher.

Overall I like grounded theory and would be interested to learn more about it to see if it is an approach I would like to use. I am a bit confused by the constant back-and-forth between data collection and analysis, but I do see that as being a beneficial approach. I like the strict guidelines to the approach of a research project set forth by more traditional methods, but I believe I could become comfortable with the less strict ways of grounded theory.

Ireland, Christopher

2003 Qualitative Methods: From Boring to Brilliant. *In Design Research: Methods and Perspectives.* Laurel Brenda, eds. Pp. 23-29. Cambridge: MIT Press.

Christopher Ireland received his education in marketing and worked managing consumer products until the mid-1980s when he realized that he wanted to focus more on the research involved in consumer products. Without any anthropological training, and apparently any idea that others were doing this, he started conducting research using qualitative methods. Ireland describes how the qualitative method of conducting focus groups grew and within market research there are eight different types of “focus groups”. The eight types of focus groups range from the traditional “moderator reads from a script” focus group to online discussions to informal parties. While I’ve never heard of most of these approaches to focus groups and I’m weary of focus groups because I don’t quite understand them, I can see where and why some of these might be useful. A focus group is likely a way to get the general vibe for a group of people quickly and with eight different approaches I’m sure you can find one that best suits your needs.

Ireland continues his discussion about qualitative methods by describing how ethnography became popular within design research- he contributes it to the influence of social scientists. Just like focus groups evolved into methods more applicable to design research,

“ethnography” evolved from its traditional role in anthropology into something better suited for quick paced design research. Ireland describes six different types of ethnography; photo ethnography, field ethnography, ethnofuturism, “real world”, personas, and digital ethnography (2003:26-27). We’ve seen examples of most of these methods in other articles this semester and I believe that most, if not all, are useful for gaining insight from the users about their lives and how the products will fit. I don’t believe any of these “types of ethnographies” are ethnographic in the traditional anthropological way, but I love that this method has been adopted/molded into a new approach that fits into design research.

Jones, Rachel

**2006 Experience Models: Where Ethnography and Design meet. Epic 2006 pp. 82-93
Electronic document, www.epic2006.com, accessed May 2007.**

Jones article summarizes the role of ethnography in design, what she views as the reasons for the gap between ethnographic data and the design process, others’ suggestions for bridging the gap, and the ways in which an “experience model” (Jones’ suggestion) could help to develop a dialogue between ethnographers and designers and thus lessen the gap. Some specific ways in which ethnography can inform technology designed (Jones quotes Crabtree and Rodden 2002) are; identifying “sensitizing” concepts, developing specific design concepts, and driving innovative technological research (2006:84). In terms of technology design in Computer-Supported Cooperative Work (CSCW), ethnography can help to “evaluate design” (2006:84). Additionally, Jones suggests that ethnography can bring to light context, identify key emerging themes in data, and help to develop experience frameworks in design research (2006:84-85).

As Jones, and many others⁶ have, suggests that ethnography can be used to inform the design process in terms of design recommendations, but there is a gap where ethnographic data is

⁶ see Blomberg et al 1993 (week 2), Wasson 2000 (week 2), and Salvador et al 1999 (week 2)

not used to inform as much of the design process as it could be. It seems as though the gap exists because ethnographic data is presented in a way that designers do not understand or care about- the two disciplines speak two different languages. Furthermore, the “thick description” of ethnographies does not necessarily pinpoint key areas and/or themes and thus is not an efficient way of conveying findings to designers. Lastly, themes found from ethnographic research may be picked up and “ran with” without giving other themes a second thought- things may be lost by not looking at the entire picture.

In their 1993 article, Blomberg et al call for a dialogue to be established between designers and ethnographers so that ethnographic data can be better utilized. A few of the approaches these authors suggest are for ethnographers to gather data and designers analyze and apply the data, OR teams of ethnographers and designers work in the field, and teams of ethnographers, designers and users can collaborate to co-design the product. Jones references Plowman et al. (1995) when suggesting ways in which the dialogue could be established between ethnographers and designers, and these approaches do not vary greatly from Blomberg et al.’s. Plowman et al. suggest that researchers (ethnographers) and designers work together throughout the phases of design and/or researchers be more forthright with their findings from the data, but not necessarily give design suggestions.

Jones is interested in having a way to establish a dialogue between ethnographers and designers so that ethnographic data can be better utilized throughout more of the design process, however her approach varies from Blomberg et. al. Jones proposes the use of “experience models” to establish the dialogue. According to Jones, “experience models are visual representations depicting key analytic relationships of the underlying behavioral structure of the organization on of an experience for the people involved” (2006:88). Experience models are

developed by gathering ethnographic data, then analyzing the data to find themes, and lastly the themes are simplified into essential elements that can be translated into a visual depiction.

“Experience models were used (at E-lab) to identify gaps in an experience for which there could be an opportunity for a design solution” (2006:89).

Jones states that the benefits of experience models and ways in which the activity of creating the models can open the dialogue between ethnographers and designers are; collaboration of creating the experience model (helps ethnographers and designers to understand the data in similar ways), identify opportunities, and the model can serve as a representation in the future (2006:90). Jones ends the article with several (very) short case studies of companies that have used experience models and how they were used.

I like the idea of using experience models and see how the act of creating the models could help to open the dialogue between ethnographers and designers. It seems like a practical and beneficial activity for both parties. I would be interested to know if and how users could be incorporated into the process though. Also, going back to the Blomberg et al. article, I would still like to see the phase of ethnographic research include designers and users as I think that would help to strengthen the understanding of the data on the part of both the ethnographer and designer (less would be lost in translation) and would enforce the dialogue.

One thing that stuck out in my mind after reading Jones’ article was the fact that experience models are used in praxis but not well documented. Now, this is most likely the case, as Jones does point out, because practitioners do not often publish and/or the research is confidential and thus cannot be written about. In *Thought & Praxis II* we read Goldschmidt’s *Notes Toward a Theory of Applied Anthropology* (2001). Goldschmidt proposes a dialogue between practitioners and applied anthropologists and for practitioners to publish in order to

contribute to the database of theories in applied anthropology. I really enjoyed Goldschmidt's article and felt that Jones' article supported what Goldschmidt was calling for.

Kelle, Udo

2005 "Emergence" vs. "Forcing" of Empirical Data? A Crucial Problem of "Grounded Theory" Reconsidered. Forum: Qualitative Social Research 6 (2). Electronic document, <http://www.qualitative-research.org/fqs-texte/2-05/05-2-27-e.pdf>, accessed June 2007.

Kelle's article focuses on the distinctions between the two primary camps of grounded theory, 'Glaserian' and 'Strauss and Corbin'. Glass and Strauss, as described by Goulding in her chapters, developed grounded theory, in 1967, but the two founders parted ways over differences in methodologies of grounded theory. One key tenant of grounded theory is "theoretical sensitivity" which calls for the researcher to be aware of any theoretical biases they might have throughout the research and to attempt to have little knowledge of theories having to do with the topic at study. The two founders have different approaches to how to be "theoretically sensitive" during grounded theory research, one way is through two different approaches to coding data. Kelle's article explains the two approaches to grounded theory and how they are similar and differ. It does not do a good job of explaining what grounded theory is, to this end, refer back Goulding's chapters for the basics of grounded theory as Kelle's article cannot be understood without this knowledge.

Kelley, Tom and Jonathan Littman

2005 The Anthropologist. In The Ten Faces of Innovation: IDEO's Strategies for Beating the Devil's Advocate & Driving Creativity Throughout Your Organization. Ch 1 Pp. 16-39. New York: Currency Double Day.

Tom Kelley, the general manager of IDEO, wrote this chapter. He's not an anthropologist and admits that when "anthropological methods" were adapted at IDEO in 1991 he was skeptical. He since, however, has become a fan of anthropology. Kelley now believes that the role of the "Anthropologist" is now the biggest source of innovation because of the

anthropologist's ability to really understand the situations- seeing what others take for granted, "reframing a problem in a new way" (2005:16), and approach a situation as if they know nothing (no preconceived notions). He says that understanding users in their natural habitat, rather than in one of IDEO's offices, has become very beneficial.

What's interesting about this chapter is that Kelley refers to the role as the "Anthropologist" but says that people in this role at IDEO have an advanced degree in social science. Now, I believe that you don't have to have a degree in anthropology to be an "anthropologist", but I will admit that I'm skeptical of this because it makes me wonder how "anthropological" this research is. Kelley seems to be using this term "anthropologist" loosely and without a great understanding of the discipline- but that's OK. He says that he once asked the IDEO anthropologists to give him a "unified theory of their role" (2005:17) and they weren't able to do it- of course they weren't, there's no such thing. Furthering my idea that Kelley doesn't truly understand anthropology is the fact that he repeatedly refers to the anthropologists as having an "informed intuition" of the situations. It's not intuition.

Kelley lists six characteristics that he sees as being unique to anthropologists; having a "beginner's mind", embracing human behavior with all its surprises, inferences by listening to their intuition, having a sense of "vujade", "idea wallets" and willingness to search in the trash. Overall I feel like his list is accurate and I can't think of anything to add. I do have a problem with the use of intuition, but I suppose that might be the best word to describe the hunches that we follow in research.

I was disappointed that Kelley did not mention where the anthropologist worked in the design process, it seems like it's just during data collection. Although he does mention the use of prototypes, so perhaps anthropologists are involved with that process. As for methods Kelley

lists the usual; observation, participant observation, video recording, and interviews. He does say that IDEO has developed a deck of 51 tools for anthropologists, but doesn't list them (I think I've seen this deck for sale online). It seems as though this deck was not developed solely by anthropologists, which is somewhat interesting. The only theory that Kelley mentions is the scientific method, which really isn't a theory, I would have liked to learn more about the theories used at IDEO. There are a few case studies in the chapter, but these illustrate what research is done, not how it's done.

I've read this chapter once before about a year and a half ago. Unfortunately I couldn't find my notes about the reading that I wrote back then. I know that at that time I didn't find anything in the chapter to be surprising and I felt like I understood it, but after reading it this time, I feel like the chapter actually had more meaning i.e., I know what "human factors" is and I better understand the anthropologist's role in the design process in relation to other team members.

Kuutti, Kari

1996 Activity Theory Basics.

In Context and Consciousness: Activity Theory and Human Computer Interaction.
Nardi, Bonnie, ed. Ch 2 Pp. 7-16. Cambridge, MA: MIT Press.

Kuutti's chapter focuses on current criticisms of Human-Computer Interaction (HCI), a field that grew out of cognitive psychology. Kuutti suggests, there is a gap between research and application in HCI and that the theoretical frameworks that guide modern HCI are not as established as one would hope from a scientific field of study. Kuutti proposes that activity theory may be the solution to this problem, and it appears that she is building off of some of the points that Bannon presents in his article "Human Factors to Human Actors." It should be mentioned that Kuutti's article presents many critiques and problems of HCI and seems to give a

thorough and what I'll assume is an objective viewpoint since she presents both sides of the argument.

“Broadly defined, activity theory is a philosophical and cross-disciplinary framework for studying different forms of human practices as development processes, with both individual and social levels interlinks at the same time” (1996:25). In activity theory, an “activity” is a scenario that is contextualized by its surroundings and is recognized to be rooted in its history and is ever-changing- thus it cannot be *truly* studied in a laboratory (as some HCI research is done).

Activities also involve “artifacts” and the recognition of such artifacts is vital to the understanding of the activity, and the histories of the artifacts should be considered as well. Furthermore, activities include objects as well; the person interacts with the object and while the object doesn't *interact* back, it does affect the person. The objects involved can distinguish activities from each other. Activities can include more than one person. According to Kuutti, an activity is the minimal unit of analysis that can be considered when analyzing the actions of a human.

Some ways in which Kuutti suggests that activity theory may help HCI are; the multi-levelness of activities, interaction in social context and the contextualization of activities, dynamics and development (how actions are created).

McCracken, Grant

1986 Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods. *The Journal of Consumer Research* 13(1): 71-84.

According to McCracken and other consumption theorists, aspects of culture are represented through material goods. The goal of McCracken's article is to contribute a theory of “... the structure and movement of the cultural meaning of consumer goods” (1986:81) to the subfield of cultural significance of consumer goods. McCracken suggests that the meaning of

cultural goods is ever changing and can be found in three places; “the culturally constituted world, the consumer good, and the individual consumer” (1986:71). McCracken suggests that cultural meaning can be found in the “culturally constituted world”, he illustrates how advertising and the fashion system can create, and re-create, meaning of cultural goods and how that meaning gets to the consumers. The “consumer good” also holds cultural meaning and McCracken explains how that the consumer through the use of four types of rituals adapts meaning. Last, McCracken briefly talks about the ways in which individual consumers give/perceive cultural meaning to goods.

I found this article to be very anthropological in the traditional sense. I say this because McCracken explores and attempts to explain (and create a theory of) an existing phenomenon. It seems that the cultural meaning placed upon material objects has existed throughout history, but McCracken attempts to explain *why* and *how* it exists. McCracken focuses on the cultural meaning and activities surrounding such in North America, given that he is a North American, and I am as well, I feel like he has represented the “native” point of view because I agree with him.

McCracken suggests that it is important to understand the fluidity of cultural meaning of consumer goods in order to understand “...what it is to be a consumer society” (1986:71). I found myself asking *how can this be applied*, how can we take this seemingly traditional anthropological theory and *apply it*. Perhaps it’s the application of his theory that makes his theory important- to participate in the translation, etc. of cultural meaning in an effective way i.e., advertising, you must understand the phenomenon. In harsh words, if you understand the cultural meaning of consumer goods and how that cultural meaning is created and maintained you can then fully exploit it for a profit i.e., how do you effectively advertise this good.

While reading this article I kept thinking of Durkheim's diamond and how what McCracken was writing about could fit into the diamond perfectly—I do realize that Durkheim was writing about religion and McCracken about material culture. From what I can recall and get from my notes Durkheim's diamond is a diagram that illustrates the practical functions of religion in a society and how religion acts as a social glue and helps to maintain social order. On the outside (at the four points of the diamond) you have "symbols", "identity", "bonds", & "values" and in the center you have "rituals". Each part of the diamond is connected and reinforces the other parts. So, for Durkheim, part of this explanation of the function of religion through these five parts was how every religion makes a distinction between the sacred and the profane... this might be related to what I'm thinking, but I don't see the connection right now.

So, on to how I think McCracken's 1986 article can play into this. In terms of cultural meaning you have the (symbols) symbolism of the object, the (identity) part of the identity that that symbolism or meaning makes up, the (bonds) bonds that people might have with others that perceive similar cultural meaning, and the (values) values placed upon objects based on their cultural meaning. In the middle (rituals) you have the four rituals that McCracken talks about that consumers use.

It seems as though both cultural meaning and religion are functional, so that is the main point. I do see the "parts" of the diamond in McCracken's article. BUT the ritual part that Durkheim explains is more holistic of the entire parts of the diamond, i.e. a shaman would have the four points when he does a ritual.

McCracken, Grant

2005 Culture and culture at the Royal Ontario Museum: An Anthropological Approach to a Marketing Problem. *In* Culture and Consumption II: Markets, Meaning and Brand Management. Ch 10 Pp. 122-158. Bloomington: Indiana University Press.

In this chapter McCracken explores the ways in which experience of visitors to the Royal Ontario Museum (ROM) and how that experience is different from what the ROM is attempting to achieve. During his three years as the director of the Institute of Contemporary Culture at the ROM, McCracken conducts anthropological research in the form of three types of interviews; in-depth, walk-about, and intercept. Participants ranged from people that have never visited the ROM all the way to people that visit the ROM often. The goal of this research is to provide the museum some insight to the visitors' point of view and experience of the ROM. He illustrates this chapter with five very different accounts from five different groups of museum attendees.

McCracken proposes that the ROM and the visitors approach the museum from two different perspectives and that these two different approaches, or sets of cultural assumptions, cause a miscommunication during the museum experience/visit. The model that ROM (or museums in general?) operates on is the preferment model. Using the preferment model the ROM has the potential to improve, civilize, inspire, instruct, and/or advance their visitors. He focuses on the ROM and the social advancement, or civilize, variation and describes how he feels that the ROM uses the status of "well to do" people and their association with the museum as a way to collect high-status cultural materials and high-status symbolic relationships.

McCracken suggests that museum visitors operate on the transformation model. He illustrates this model by using the popular Sharks! exhibit at the ROM. Visitors felt alarmed at the sharks on display, then accepted the alarm as fear and moved on to admiration of the sharks, and lastly they recognized the similarities of sharks to humans.

These two models, the preferment model and the transformation model, are crucial to understanding why visitors do not experience the ROM as the ROM staff intends them to. Most visitors are intimidated, overwhelmed, un-intrigued, etc. by the variations of the preferment model. Furthermore, visitors are not necessarily seeking to “increase their social status” when visiting ROM. ROM has not fully recognized that its function for the public has shifted away (for some visitors) from the traditional status symbol and more towards what the *visitors* want to experience. Visitors are creating their own expectations and desires rather than being told or given what ROM desires them to have.

In order for the ROM to be a success in the eyes of the visitors’, the ROM must stray from its traditional preferment model and towards the visitors’ expectations- what they want to experience and what their cultural assumptions are.

It was hard to get past the museum part of this chapter- I’m not a huge fan of museums 😊 Once I got through McCracken’s explanation of the preferment model and the transformation model and how this all relates to the museum, I found what he was actually saying to be somewhat interesting. Essentially the ROM, a prominent cultural institution, has an antiquated approach to reaching visitors and has not recognized that the power of having the dominant cultural assumptions and expectations now lays with the visitor. So, it shows how cultural meaning has shifted away from the ROM and onto the visitor- the museum is no longer the one that dictates the meaning.

Malefyt, Timothy D.

2003 Models, Metaphors and Client Relations: The Negotiated Meanings of Advertising. *In Advertising Cultures. Timothy D. Malefyt and Brian Moeran, eds. Ch 6 Pp. 139-165. New edition. Gordonsville, VA: Berg Publishers.*

For this chapter the author, Timothy Malefyt, draws on his experience as an anthropologist employed by an advertising agency and specifically references a workshop that he participated in. As an anthropologist, Malefyt draws upon the theoretical frameworks of sociolinguistics and symbolism. This is evident in his writing about the workshop. The workshop that Malefyt is referring to was one put on by an advertising agency for a potential new client. Malefyt describes all of the deliberately used language and symbols used by the advertising agency during the workshop as a way of “managing the impression” made upon the client.

I didn’t find this chapter to be particularly interesting. While I enjoy examining and critiquing advertisements i.e., product placement or the coy pose of a female model in relation to the dominant male model, I don’t find advertising to be interesting. Since I did not find the advertising part of this article to be helpful in my own interests, I tried to really relate it back to design anthropology in general. What I came up with is that the advertising agency’s strategy for relationship building can be applied to the collaboration efforts of an interdisciplinary research team. It can be beneficial for the initial meeting of the team members to meet on neutral territory, a common language is helpful for members to understand each other⁷, and having an equal balance of power in all aspects of the team helps to give everyone a voice.

One thing I did enjoy about this chapter was how the author deconstructed the workshop- on the outside it appears as something different than it actually is, the agency hosts the client at a resort in an effort to brainstorm and bond in neutral territory and this seems innocent, but what is

⁷ see Sacher’s (2002) Semiotics as Common Ground *in* Creating Breakthrough Ideas

actually happening is the agency is positioning itself to obtain loyalty from the client and also to construct the dynamics of the relationship. As an anthropologist I have become more used to looking at situations beyond how they “appear”, I notice the power structure, the symbolism, the non-verbal communication, etc. I felt that Malefyt did a good job to illustrate how complex a seemingly innocent situation is- you can take his analysis of the workshop of an advertising agency and apply it to other scenarios. In a business environment it’s likely that every detail has been calculated.

Malefyt, Timothy D, and Brian Moeran

2003 Introduction: Advertising Cultures – Advertising, Ethnography, and Anthropology. *In Advertising Cultures. Timothy D. Malefyt and Brian Moeran, eds. Introduction Pp. 1-33. New edition. Gordonsville, VA: Berg Publishers.*

This chapter gives, what I assume to be a brief, overview of advertising and also an introduction to how ethnography is used in advertising. Ethnography, an anthropological method, has become a popular tool in advertising research, however in advertising ethnography is a goal-oriented task rather than a holistic approach to learning about a culture. The authors proved ten points about the similarities of advertising ethnography and anthropological ethnography. Also listed are eight differences between the two. Furthermore the authors describe some of the ethical issues of ethnography in advertising and the various power situations encountered during ethnography in advertising.

One of the most helpful parts of this chapter was actually the brief overview of advertising. I’ve never read anything about advertising and upon beginning this chapter I realized I didn’t know the difference between marketing and advertising. As is to be expected, having a general understanding of advertising helped to make sense of the rest of the chapter(s). It was also to have the brief overview of ethnography, as well as anthropology for that matter,

from the authors' perspective, because *what* ethnography means most likely varies from person to person- just as the authors describe it's not a set in stone, standard activity.

In the later part of the introduction the authors recognize what role anthropology takes in the corporate world; ethics, methods, theories, time frames, etc. The authors are not writing of just anthropology in advertising, but anthropology in the corporate world. I thought this part was interesting because it brought back a reoccurring thought that I've had throughout this course: how different is anthropology in the business world and anthropology in academia? To be successful in the business world anthropology has to modify from its traditional roots- time in the field must be shorter, methods must be reformed to an abbreviated version, analysis must be done quicker, and collaboration (through all phases) should (must) include others i.e., clients, users, research team members, etc. I understand why business anthropology might be viewed as "impure" or "bastardized" by academics, however I believe this is not the case. The fact that anthropologists have (and still are) adapted traditional anthropology towards life in the corporate world should be applauded because it brings recognition to the discipline from non-academics – this is good so long as these anthropologists maintain the same high standards and earn a good reputation. Which brings me to another thought- I believe that anthropological methods, etc. can be adapted to the business world and be "just as good" as the traditional ways, but it is important for people practicing anthropology outside of the academy to maintain the same rigorous approach despite the lessened time in the field.

Miller, Daniel

1995 Consumption Studies as the Transformation of Anthropology. *In Acknowledging Consumption*. Ch 8 Pp. 264-295. London: Routledge.

In this chapter Miller suggests that consumption studies in the modern day and of the modern day, would be (or has been) transformational to the field of anthropology because it would bring an anthropological focus to the Western world and away from the “indigenous”. Miller explains that the birth of consumption can be pinpointed to 1978-79 and started with the works of Douglas, Bourdieu, and Isherwood. These three theorists called for anthropology to recognize the importance of structural consumption in the modern day and to recognize that mass production of goods was not necessarily an “evil” that was robbing the world of culture. Consumption studies calls for a focus on how mass-produced, as well as non-mass-produced, products are being adapted by various cultures and how new materials are being consumed in various ways.

Miller’s chapter continues on with a seemingly throughout account of the history of economic activities studies in anthropology and how the “new” consumption studies in anthropology has developed from the shift in focus. Also, Miller describes another approach to consumption studies, structuralist that emerged as a critique the economists approach. As is the case with most anthropological paradigms and theories, consumption studies seems to have emerged as a form of critique and reaction to the preceding theories.

I greatly appreciated this chapter’s call to turn the focus of anthropology to the Western world. Since my very first anthropology class I’ve loved anthropology- but I never had an interest in studying outside of America, and didn’t really like the idea of not being involved in business. I loved the methodology and theories of anthropology and saw great potential for their application in the business world. This chapter was particularly interesting because it explained

how other great anthropologists before me felt the same way and how the field of consumption studies has brought an anthropological presence to the West. One of my biggest pet-peeves is that people say America has no (or little) “culture”, I feel that America has a lot of culture and that people need to re-evaluate their definition of culture to consider non-indigenous matters.

Miller says just that in his chapter.

Miller, Daniel

1998 Why Some Things Matter. *In* Material Cultures: Why Some Things Matter. Ch 1 Pp. 3-24. London: University of London Press.

Miller’s chapter provides the historical context for the emergence of material culture studies and provides an overview of the rest of the book (that this chapter is in) “Material Cultures: Why Some Things Matter” (1998). Miller says that the development of the studies of material cultures can be seen in two stages; stage one would be the idea that “...social worlds were as much constituted by materiality as the other way around” (1998:1) and the second stage would be the ways in which studies on material artifacts can be enhanced by examination through the lenses of various disciplines and that the specificity of the objects must be examined also to explore the objects holistically. Miller’s chapter describes some of the influencing theorists and case studies that have shaped material cultures and introduces the following chapters that expand upon the topic of material cultures and provide examples.

Miller explains the reasoning for the title of this particular chapter, “Why Some Things Matter,” he says that the wording of *matter* versus *importance* is crucial because *matter* would seem to provoke a focus on what the owners of the materials feel its meaning is versus the researchers idea of the meaning. Material cultures study seems to place high value upon the emic point of view of the materials and values.

After reading this chapter twice, I believe that the general concept of material cultures is to study material within the context of culture and to explore the materials' role in the culture and the cultures' influence on the materials. Miller says to think of material cultures as a methodology rather than a theory and explains that it is not heavily rooted in any particular discipline. Through the use of ethnography, the reported value placed on materials and consumption can be explored and any differences between the reported value and the actual value can be discovered. Also, the ways in which cultures use consumption of materials to reproduce identities and how materials are incorporated and altered to fit the local culture can be explored.

I believe that if I understood material cultures better I'd like the concept because of its structuralist undertones, but I found Miller's writing style so overly complicated, and thus confusing, I was turned off by the chapter. The idea of looking at the function of materials and the consumption in society and how these two aspects reproduce culture sounds interesting.

Norman, Donald

2002[1988]a The Psychopathology of Everyday Things. *In The Design of Everyday Things*. Ch 1 Pp. 1-33. New York: Basic Books.

Norman introduces his theory that "Well-designed objects are easy to interpret and understand. They contain visible clues to their operation" (2002:2). He illustrates his theory with a variety of examples of common everyday objects that do not visually signal how to operate them, clues, and feedback and thus are not easily operated- no matter how well the product is designed by the designer. Norman's examples are ones that are well-designed from a designer's standpoint, the objects are aesthetically pleasing, however the aesthetics do not offer what Norman refers to as "natural design." *Natural design* is essentially the use of design elements that signal how to use objects in a way that humans can naturally understand, interpret,

and use, these elements do not need to be symbols that serve as directions. In Norman's opinion, if an object *needs* written directions or symbols the design has failed- he appears to be suggesting that well-designed objects are easily understood and not just aesthetically pleasing.

Getting into the psychology of objects, Norman explains the term "affordance."

Affordance is the material's perceived and actual properties, knowing what utilities a material may have will help the person interacting with the object to be able to understand what the object is capable of e.g., fire is used to increase temperature, thus an object that produces fire will likely be used for such. *Affordance* is in keeping with the idea of well-designed objects offering visual cues about the object's function.

There are a few other terms in chapter one that are important and all are centered on visual cues. *Conceptual models* are essentially what the human brain does when it encounters an object; it tries to mentally create a picture of how the object will work. *Mapping* is the relation of the design of the object and its function e.g., to raise the temperature of the air conditioner move the sliding knob up. According to Norman, *mapping* problems occur often in poorly designed objects. *Feedback* is when an object gives visual feedback i.e., a blinking light, to let the user know that the desired function was actually performed.

I really liked this chapter because Norman's concepts were simple (as is to be expected from his theories of well-designed objects) and made sense. Although I liked what he had to say, I am a bit confused about what he seems to be presenting as the burden of designing well-designed objects solely on the designer. In his examples he illustrates many objects that are aesthetically pleasing yet confusing to the user and all of these objects seem to be designed by a designer that had only aesthetics in mind. As I understand it, many things e.g., software programs are designed by designers and the products are *rarely* tested for usability prior to

release. Norman does not address *how* the designers should *know* what a consumer/user will be able to use. He suggests visual cues, but I'm not sure that would be enough- it feels like well-designed objects should have a combination of the visual elements that Norman presents *and* empirical field work.

I can see where Norman's concepts would be complimented by applied anthropological research.

Norman, Donald

2002[1988]b User-Centered Design. *In* The Design of Everyday Things. Ch 7 Pp. 187-217. New York: Basic Books.

Norman starts of this chapter by saying that the POET (Psychology of Everyday Things) is a way of advocating for user-centered design. I think that his concept of what user-centered design essentially is best summed up on page 188; "(1) the user can figure our what to do, and (2) the user can tell what is going on".

Norman suggests that a well-designed system contains three conceptual models; *design model*- what the designer intended for the system, the *user's model*- how the user interprets the use of the system (*natural mapping*), and the *system image*- that the system is consistent and follows the *user's model* and it also may contain the user's manual and instructions (2002:189-190). A new concept that Norman presented was that POET can be reversed if an object needs to intentionally need to be made difficult to use e.g., child safety devices.

Much of the rest of the chapter explains, in essence, that simplistic design is better than overly complicated design, which is in keeping with Norman's use of visual cues (not over-stimulating) in design. He continues with the idea of making the object's function visible, making the results of actions (or the action of actions) visible, and by giving the user control over the object.

Plowman, Tim

2003 Ethnography and Critical Design Practice. *In Design Research: Methods and Perspectives.* Laurel Brenda, eds. Pp. 30-38. Cambridge: MIT Press.

Tim Plowman is a trained anthropologist who works in the private sector. The main point of his chapter is to illustrate how a modified (from traditional anthropology) version of ethnography can enhance design research and how this modified version of ethnography differs from academic ethnography. On page 33 Plowman has put a four quadrant chart. Each quadrant has various methods, which combined represent the methods involved in academic anthropological ethnography. The quadrants are; quantitative visual methods, quantitative verbal methods, qualitative visual methods, and qualitative verbal methods. Plowman says that the methods used in qualitative visual quadrant are the ones most used in business; videotaping & photography, artifacts & material culture collection, local model & representation collection, passive observation, and participate observation.

Plowman acknowledges that the methods used in the “business world” are abbreviated versions of their academic counterparts but suggests that with enough training and experience the business world’s methods are just as respectable. One point made in the chapter that I thought was interesting was that Plowman says that the focus/goal of design research is a narrower scope than that of academic ethnography. The point in design research is not to understand a small group in its entirety, it’s to understand certain elements of the group. According to Plowman, private sector ethnographers gain expertise of the methods through experience (this part I can’t argue with) and that this expertise allows for them to pick out the relevant bits of data from the collected data- this part seems a little non-anthropological to me. I say non-anthropological because it seems that Plowman is suggesting that the ethnographers are approaching the data with pre-conceived notions and biases—what happens to the data that suggests the “unknown”.

It seems to me that this would not lead to new discoveries, it's important to play the "wide-eyed learner role".

Robinson, Rick E.

1993 What to do with a Human Factor: A Manifesto of Sorts. Special issue, "New Human Factors," American Center for Design Journal 7(1): 63-73.

Robinson's article is in reaction to, or rather support of, Norman's book "The Design of Everyday Things" and focuses on how Human Factors (HF) should be used to design *better* products, usable products, and to answer to users' actual needs rather than creating what they think the user's need. Robinson refers to Norman's approach as the "cognitive human factors approach."

Essentially Robinson's article sums up "good design" as being usable and that *usability* should be informed by *how* humans understand things, socially and culturally, and that good design cannot force humans to understand things differently than they already do. Robinson's article explains what cognitive sciences can add to design by explaining that design should center on how people already understand things. Additionally, Robinson suggests that contextualizing objects within society and culture is important to how people understand, because understanding is relevant. Furthermore, Robinson advocates, much like Bannon, that design should be informed from empirical research.

Sacher, Heiko

2002. Semiotics as Common Ground: Connecting the Cultures of Analysis and Creation. *In Creating Breakthrough Ideas: The Collaboration of Anthropologists and Designers in the Product Development Industry.* Susan Squires and Bryan Byrne, eds. Pp. 175-195. Westport: Bergin & Garvey.

Sacher's chapter is about the use of semiotics in design projects as a "common ground" for analyzers, who are typically academically minded social scientists, and creators, who are typically designers and developers. Sacher, who identified herself as a creator, believes that semiotics, which focuses on language, communication, and symbolism, can be used to bridge the gap of understanding that exists between analyzers and creators and also users. Both analyzers, the social scientists, and creators, the designers, have a background and history of using language and communication, this is why Sacher suggests this approach is beneficial- it's a common ground of both worlds. Furthermore, semiotics is particularly beneficial in product development because it will help to bring understanding to the creators of what is, or is not, working from the users' perspectives. Analyzers appear to be a crucial part of this stage because they can observe and translate between users and creators. Sacher writes about how and why semiotics is so beneficial and illustrates her case with a case study in which semiotics was used in the development of a UI- she coined the approach "semiotic modeling".

I enjoyed the example that Sacher provided that explained how semiotics can be used in research and development for a user interface. Sacher explained how creators, in this case a designer and two software developers, and analyzers, two social scientists, worked with users, scientists, through semiotic research to capture what had been lost in translation between the creators and the users. The scientists did not understand the terminology that had been used in the original interface, but through the collection of feedback, task analysis, interviews, observation, visual mapping, and the creation of two semiotic models it was discovered that

scientists did indeed find value in the database, but did not understand the original terminology. I felt that this was a good example because it used *scientists*. It might be a common belief that scientists are smarter than the average person, so if semiotic modeling is needed to create a user interface that a scientist will understand and use, it really shows the power of the approach. If scientific software can be bettered through the use of semiotics, just think what “less-complicated” user interfaces could gain. Furthermore, the fact that scientists did not understand the original user interface might make others feel less badly about not understanding. Although, Norman would tell them that it’s product error and not user error.

Sacher repeatedly states that semiotics will become a popular approach in user interface design. I can see the value in it because it makes clear *what* about a user interface, etc. is not being understood by the users and what the creators might change to make it more clear. But, I can see where this might take the supervision of an analyzer to research. Much like semiotics, and all of Sacher’s article for that matter, seems to address is the fact that different stakeholders and actors talk/think about things in different ways- semiotics can be a step in finding the common ground and the similarities that are being discussed/experienced but not realized because of the different terminology.

Sacher identified herself as a creator, meaning that she was a designer. This gives her a little different perspective on the design process that we have read about in other articles in this course because a lot of what we’ve read has been from the analyzer’s point of view. Sacher writes about how analyzers become suspicious when creators improvise design changes that are not based on research and a few other struggles that analyzers have with creators’ approaches and creators in their development team. It’s interesting because Sacher presents the two fields as being polarized and struggling to find a way to work together and Wasson’s article is a great

example of how creators and analyzers can work together and do work together- although Wasson does acknowledge it takes conscience effort from all team members.

Salvador, Tony, Genevieve Bell and Ken Anderson

1999. Design Ethnography. Design Management Journal 10(4): 35-41.

Salvador, Bell, and Anderson define “design ethnography” as being similar to traditional ethnography in methods, theories, approaches but different in the application of the data and the time-constraints that limit how much time can be spent in the field and which methods to use. Some of the theories that the authors’ reference are; feminism, Marxism, post-modernism, and popular culture trends. Some of the methodologies mentioned are; participant observation, interviewing, observation, social mapping, family history, videotaping, literature reviews, and demography. Design ethnographers are always experimenting with new, or altered, methodologies.

The goal of design ethnography, as laid out in this article, is to inform designers and employees of the companies about their consumers. In essence, design ethnography provides tools for contextualizing consumers (in their culture, wants, needs, homes, life) within their actual lives, versus what they report doing, and this data can be used to inform better-designed products. Salvador, Bell, and Anderson claim that design ethnography can help to bridge the consumers with the designers, they suggest that designers, even if they live the community of interest, are not the same at work as they are at home and thus loose focus of the consumer. In fact, this is one of the two things that the authors suggest that design ethnography can bring into industry. The second is that the data collected can lead to a better, true understanding of the target audience, thus increasing sales.

There are two short case studies included at the end of the article. The first is about a short fieldwork trip to Italy in which the goal was to understand Italian life. During their stay,

the fieldworkers establish rapport with their informants by learning about their families through questions and stories. The data collected suggests that Italian home-life is very different from American home-life and that Italians focus family activity in the kitchen. This data can be used for new product development- products should be designed for the kitchen because that's where Italians "live."

The second case study is focused on e-commerce. Four ecologies of commerce were discovered from the collected data. Most American shopping experiences fall into one of the ecologies. Designers can either consider the ecology that they *want* their product to fit into and design accordingly or they can decide which category the consumers will see the product in and design accordingly.

Sanders, Elizabeth

2002. From User-Centered to Participatory Design Approaches. *In Design and the Social Sciences: Making Connections.* Jorge Frascara, eds. Pp 1-8. London: Taylor and Francis.

Sanders is a social scientist that has been involved in design research since the early 1980s. Her initial role in the design process was to serve as a mediator between the designer and the user; as the human factors specialist, she was responsible for representing the user's side. She refers to this as the user-centered design approach and says that the researcher represents the user; the user does not have an actual role. The researcher collects data and analyses the data, the designer then takes the data and designs the product. The researcher and user are not usually involved in the process after analysis and the designer is not usually involved with the process prior to the design start.

As of the late 1990s Sanders has become more involved with participatory design. This approach gives the user much more power, perhaps equal power, in the design process. Also, the goal of designing has shifted away from being object-oriented and more towards "experiences".

The research being conducted to understand/explore the users' experiences focuses on what users say and do and also what is unspoken. This shift towards users involvement throughout the entire design process as well as towards understanding the spoken and unspoken aspects of present, past, and future experiences has led to a more collaborative process involving the designers, users, and researchers in all phases. I believe that the focus on experiences during data collection can be greatly benefited from anthropological methodologies because of the discipline's strengths in holistic observation and contextualization.

Lastly, Sanders writes about the Make Tools. Sanders does not actually give a definition of Make Tools but I gather that they consist of methods that produce visual artifacts and that these visual representations serve as a common language for designers, users, and researchers to communicate with. Make Tools can consist of cognitive and emotional methods for users to share their experiences. Sanders says that users are often asked to share the stories they've produced with the Make Tools. We also saw the use of visual representations as a common language for designers, users, and researchers to communicate with in Sacher's⁸ article.

In a way I really see the value and importance of being able to use visual means of communication amongst the various stakeholders because there is no jargon- no new terminology to learn, in theory everyone can understand a simple diagram, etc. But, I'm a little disappointed that none of the authors that have mentioned visual communications as a common language have acknowledged that the use of visual aids might be intimidating to the users and researchers when they are in the presence of the designers, people known to be artistic. Perhaps this isn't a problem.

⁸ 2002 Semiotics as Common Ground in Creating Breakthrough Ideas

Silverman, David

1998 Conversation Analysis. *In* Harvey Sacks: Social Science and Conversation Analysis. Ch 6 Pp. 98-127. New York: Oxford University Press.

Silverman's chapter focuses heavily upon Sacks' notion of Conversation Analysis (CA). He uses Sacks' lecture notes, and expands upon them, to explain the linguistic analysis needed in CA. Woodruff and Aoki also reference Sacks. This chapter essentially gives the history of CA (Sacks' appears to have coined the term) and the basic foundations of CA- however these foundations appear to be rooted in conversation analysis, which differs from Woodruff and Aoki's use of CA. Silverman explains what Sacks was looking for and how he found it, and that CA was a result. Sacks wanted a way to study "actual activities", so he created units of conversations to structure the data- with this sequencing of units was better understood and how the units are handled was better understood, and a relationship can then be explored. Woodruff and Aoki appear to speak of CA in a similar way- but on a more meta-level (not focused on just turn taking and units, etc).

Sacks' CA is focused on the conversations of humans with one another. Silverman's chapter focuses on the foundations of CA, and the only methods he mentions are recording and discourse analysis. The foundations are further illustrated with examples of the application of the analysis of the foundations in telephone conversations and storytelling. The foundations of the organization of conversations are; "people talk one at a time, speaker change recurs, sequences that are two utterances long and are adjacently placed may be 'paired' activities, activities can be required to occur at 'appropriate' places and certain activities are 'chained'" (1998:103).

I read the Woodruff and Aoki article before the Silverman chapter; this was good because it gave a very brief, but sufficient, overview to CA. Interestingly enough, I struggled with Woodruff and Aoki's statement that CA assumes that interactions are *structured* because of their lack of linguistic analysis detail. However, after reading Silverman's chapter the assumed structure is evident- it comes from the structure of conversations- and seeing as CA is heavily rooted in linguistics, this makes perfect sense. The two articles approach and discuss CA in very different ways- Woodruff and Aoki seem to use an evolved version of CA, in that they use more data collection methods and seem to be interested in the application of the data. But there are similarities- more than discourse analysis- in the two; both focus on conversations, sequence/order of events and patterns in such sequences.

Silverman mentions "deviant case analysis" and refers to chapter four of the book that this chapter is in- I'd like to look more into that.

Sunderland, Patricia L. and Rita M. Denny

**2003 Psychology vs Anthropology: Where is Culture in Marketplace Ethnography?
In Advertising Cultures. Malefyt, Timothy D. Malefyt and Brian Moeran, eds. Ch 8
Pp. 187-202. New edition. Gordonsville, VA: Berg Publishers.**

The authors of this article, Sunderland and Denny, are anthropologists that work in consumer research. As anthropologists in the industry they have experienced anthropological methods being used in a way that isn't anthropological- they argue that the methods are used to answer questions of psychology, namely the psychology of the consumer. Ethnography is being used to understand aspects of consumers' lives that are psychological, rather than cultural and the data are being interpreted in that manner. The authors have a very post-modern tone when writing about how ethnography should be conducted and the data analyzed; the traditional wide-eyed learner of doing away with assumptions and while observing questioning *everything* that is happening.

The authors contribute a lot of the focus on what is actually psychological to the people conducting the research, they say that what the questions being asked are about psychology rather than culture. Although ethnographic methods were used in one of the studies that the authors cite, the analysis still shifted to understanding the psychology of the consumers. They share their many experiences with trying to redirect clients towards understanding the cultural frameworks rather than psychology.

I found this article to be particularly interesting because the author's focus on what is *not* anthropological in market research. Ethnography, an anthropological methodology, has become a popular method in such research but this does not mean that what surrounds it is anthropological- the authors suggest most of it is actual based on psychology. One of the things that I'll take with me is to be aware of the tendency to move towards "psychological analysis" and away from "anthropology analysis"- I'll try to redirect any studies that move towards the psychology of consumers back to the cultural frameworks of consumers. The authors recognize that this may be easier said than done, especially given anthropology's roots in psychology, but I think it's an important task. Also, I'm not too familiar with psychology, so it shouldn't be too hard for me!

Sunderland, Patti and Rita Denny

In Press (2007). *Doing Anthropology in Consumer Research*.

Ch 1 Pp. 1-14. Walnut Creek: Left Coast Press.

I particularly liked this chapter because of the easy-to-read style in which it was written. I loved the "real-world" examples and quotes that illustrated some of the points made and also the "conversational" style of writing- I felt like I was engaged in conversation more than I was reading a chapter, it was very non-academic. I felt like I was catching a glimpse at what it would be like to work as an anthropologist in the business world. I didn't feel like I learned much about

being an anthropologist and conducting consumer research. But that didn't seem to be the focus of the chapter; the focus was more on providing a nice, and very brief, introduction to the history of ethnography, anthropological ethnography as well as not-so-anthropological ethnography, and its dealings with consumer research.

According to Sunderland and Denny, the use of ethnography in consumer research became particularly popular during the years of 1995-2005. It appears that companies wanted to conduct research that would provide better insight about their consumers and to develop a brand "experience" rather than just a product generated the demand. While not all ethnography that has been conducted in this realm has been of the same high standards that anthropology calls for as a discipline, the authors, who are full-time applied anthropologists working in consumer research, do say that not ethnographies have been sub-par.

The use of ethnography in consumer research emerged in the 1940s and 50s and focused on "symbolic analyses of consumer research". In the 1950s there was a relationship between applied consumer research and the academy, but those ties were broken in during the 1960s and 70s as anthropologists had less of an interest in working in the private sector. In the late 1970s ethnography/anthropology began to come back to consumer research. Throughout the last 50 years or so anthropologists and business (as in attended business school) have had an odd, and distant, relationship- the article recounts some anthropologists' accounts of being in both worlds.

Wasson, Christina

2000 Ethnography in the Field of Design. *Human Organization*. 59(4): 377-388.

Wasson's article contextualizes how anthropological methods have been used to inform organizational and designs in the 20th Century, thus making the leap to ethnography in design makes more sense. Applied anthropologists have worked in the private sector for a few decades, but the role of the anthropologist as analyst seems to be relatively new.

Prior to ethnography being used in design, other social science approaches were used i.e., cognitive psychology in human factors (HF). Wasson quotes Norman's chapter about design communicating the use of a product to the consumer easily. An interesting point that Wasson articulates in her article is that ethnography can inform the *function* of products- Norman insinuates this in Chapter 1 of DOET, but appears to focus on aesthetics as much as function (designers *seem* to focus more on aesthetics than function). Marketing research has, and is still, used by businesses as an attempt to better understand their consumer.

According to Wasson, ethnography can inform design by identifying ways in which consumers live and what they need. Like Salvador et al., Wasson suggests that some consumer's needs cannot be identified easily without ethnography to fully understand the situation.

Some of the design approaches that Wasson suggests can be informed by ethnography are; participatory design and computer-supported cooperative work (CSCW). CSCW was one of the first design fields to use ethnography. Some methods that Wasson mentions are participatory design, activity theory, and, conversation analysis, participant observation, video recording, interviews, and photo narratives. Wasson incorporates her experience of working at E-lab and some of the aforementioned methods that were used there.

A point that Wasson makes in her article is the counter-argument *against* ethnography being used in the business world that might be used by a traditional academic. In fact, Wasson consistently presents the "two-sides-to-the-argument" approach throughout the article, and this is helpful to the understanding of ethnography in design.

Wasson, Christina

2002 Collaborative Work: Integrating the Roles of Ethnographers & Designers. *In Creating Breakthrough Ideas: The Collaboration of Anthropologists and Designers in the Product Development Industry.* Susan Squires and Bryan Byrne, eds. Pp. 71-90. Westport: Bergin & Garvey.

Wasson's chapter describes the equal collaboration of researchers and designers in teams at, what was then called, E-Lab, a Chicago-based consulting company. E-Lab was a unique consulting firm in that the main priority was to have an equal investment by researchers, or ethnographers and designers throughout all phases of a project; project proposal, data collection, data analysis, development of frameworks, general design implications, and specific design recommendations. Of course, particular projects and particular phases of the projects required varying levels of expertise, so there were times when either an ethnographer or a designer took "lead" of the teams that were equally made up of ethnographers and designers. Wasson's chapter describes how E-Lab maintained their commitment to the equal partnership, how the employees dealt problems within the research teams (in terms of who was to be involved and how), and how the ethnographers and designers learned to accept and incorporate the others' discipline in the project i.e., designers learned to do participant observation and ethnographers learned to visually represent their findings. The collaboration of ethnographers and designers was represented in a "bow tie" model and as the employees learned and changed their collaborations the model was adjusted. Since the company also felt that clients should be involved in the process, the bow tie model was eventually updated to represent the clients' involvement as well.

Wasson's article was very interesting because it really provides insight into how researchers and designers *can* collaborate throughout the entire stage of research and product development. E-Lab's approach appears to be idealistic at first- too good to be true. However,

as you read the article you realize that it was true, but took a lot of reflexivity and effort to maintain such collaboration. I say “idealistic” because this is exactly the type of team I would love to work in; a team made up of multidisciplinary members that are involved in every stage of research and product develop, but also maintain what appears to be a rigorously scientific approach and has constant contact with the client. Sounds ideal!

Woodruff, Allison and Paul M. Aoki

2004 Conversation Analysis and the User Experience. *Digital Creativity* 15(4): 232-238.

Woodruff and Aoki begin their article with a very brief introduction to the use of Conversation Analysis (CA), a sociological method, in design. According to the authors, CA has been used in a variety of approaches to design i.e., user experience design and Human-Computer Interaction (HCI). CA is an appropriate method within design research because it brings a focus onto the details of human-machine interaction; however, it is not easily used because CA is something that is best learned through use (and thus is not always used in the same way as it would be in sociology).

CA, according to this article, is a type of ethnomethodological research that is concerned with exploring the ways in which members of a culture interact socially and with which methods. The goal of CA is to be able to explain “how the sequences of action are organized and situated in a particular instances of activity, as well as to abstract features that generalize across a collection of similar instances” (2004:233). CA entails two-steps, the first being to study each instance/sequence in detail and second to compare the instances/sequences to one another to find the patterns. CA assume that such instances/sequences of a culture will be organized in a structural manner.

The authors illustrate what CA is further and how it can be used through two case studies; electronic guidebooks for a historic houses tour and mobile audio communication systems. The

case study of the electronic guidebooks explored how tourists used guidebooks on tours and how they interacted with the books *and* each other. It was found that users' often want to interact with each other, but that most guidebooks do not encourage with such interaction. Some of the methods used to research that were mentioned are; observation, device logging, semi-structured interviews, audio recording, and video recording. In terms of analysis, the authors mention discourse analysis. It was found that subtle changes in prototypes led to the best design in the guidebook.

In the guidebook study it was found that the books needed to lend themselves to disengagement and re-engagement of conversation. The researchers took that idea into their next project in which they explored ways to make conversations that are not happening in person, and possibly with many participants, more like face-to-face conversations. This case study and goal was not as clear to me as the first (possibly because I'm not familiar with the terms and practices) but it was evident how much linguistic analysis is used (or can be used) in CA.

In reading this article, I was surprised to learn that CA is not simply the analysis of *verbal conversations*, but rather of all conversations; technology-human, human-to-human, etc.. Although the authors do suggest that they are most concerned with human-human interaction and that technology is part of those interactions. I *believe* that this is not the case in the traditional use of CA by sociologists.

I believe that this method is one that I could really learn to like and would really like to explore it further. I like the detailed analysis of various scenarios and than the comparing of them to find patterns and I believe that this is sort of how my brain works- so this could come naturally (or more natural than other methods). In fact, when I was doing the analysis of transcripts, informal interviews, and field notes for my subculture of smokers I found patterns to

the members' interactions with other (and with the cigarettes) i.e., length of conversation is determined by time it took to smoke. This is a pattern that is often taken for granted by smokers, but was revealed through the comparison of data- this might have been an elementary (and accidental!) form of CA. I can see one of the great benefits of CA being that it brings to light taken for granted, or unrealized, elements of interactions because of its' roots in linguistics and as we learned in Silverman's chapter. It seems that CA such as Woodruff and Aoki have taken classic CA to a whole new level by using it too examine exchanges that are more than human-human conversations.

The authors mention "contextual design" as a popular design research method, I'd like to look this method up and learn a bit more about it. Another thing mentioned by Woodruff & Aoki and Silverman is "ethnomethodology" and I need to look this up as well.