

Final Report to the Alfred P. Sloan Foundation
July 22, 2001

**Families and Work: An Ethnography
of Dual Career Families (Grant Number 98-6-21)**

Project Director: Dr. Charles Darrah
Project Co-Directors: Dr. Jan English-Lueck and Dr. James Freeman
Department of Anthropology, San Jose State University
1 Washington Square, San Jose, CA 95192-0113

1. Introduction

This report reviews project activities from September 1998 through July 2001 and it summarizes the major project findings. The discussion of project activities is organized into three sections. First, we review the activities of project development, participant recruitment, fieldwork and data management/analysis. Second, we summarize the characteristics of each of the participating family and the fieldwork conducted with family members. Third, we review the status of our efforts to disseminate information about the project. These efforts include participation in conferences and workshops, reports and publications, and media coverage. We adopt an inclusive approach to dissemination including information about the status of our earlier and ongoing research on the Silicon Valley region.

The discussion of project findings recapitulates the team's initial assumptions and questions and then describes the impact of fieldwork on them. The project began with a provisional set of assumptions and questions that were grounded in both the scholarly literatures on work and families, and in the team's previous research in the "Silicon Valley" region of northern California. They were provisional in the sense that ethnographers must make some assumptions in order to initiate fieldwork, but those very assumptions become the object of revision as they are challenged by the realities of fieldwork. Accordingly, modifications to how we think about a subject is itself an important product of ethnography, and so we present the revised conceptual framework that ultimately guided fieldwork. The project's major substantive findings are then summarized, as is our assessment of the project's significance. Finally, we comment on our future plans, including preparing a book manuscript, and their connections to this project.

2. Project Activities

2.1. Development, Recruitment and Fieldwork

2.1.1. Development of the Project

Project development centered on the challenges of conducting fieldwork with dual career middle class families, the complexity of whose lives render observation difficult. Fundamental logistical choices had to be made concerning where to conduct fieldwork and who to conduct it with, since we expected family members to be mobile and separated during much of the day. A first decision then was that only one PI/fieldworker would study each participating family in order to maximize logistical continuity. Indeed, each member of the team knows the members of families he or she studied, but has never met the members of the other families. A drawback of this approach might be the absence of alternative field perspectives and practices, but the team is convinced that the gains in trust and intimacy (not to mention convenience for the participants) were absolutely essential to meeting the project goals.

Ultimately, fieldwork was divided into three phases that were in practice adapted to the circumstances of each family. First, the fieldworker accompanied the individual family members during their days, often remaining with them for 10-12 hours at a time. For adults, this typically meant arriving at the family home before the “focal” family member departed on his or her commute, “shadowing” the person while they worked, and then returning home with them at the end of the day, often stopping to collect children or dinner on the way. For children, the fieldworker typically arrived at home to accompany the child to school (or day care prior to school), spent the day sitting in classes, and accompanied the child to his or her after school activities. Child and fieldworker returned home together, usually after being picked up by a parent. The fieldworker usually terminated the day’s fieldwork upon returning home, since the focal person was generally ready to live life away from the gaze of the anthropologist. Likewise, the intensity of note taking often left the fieldworker exhausted. Ending fieldwork for the day at this point was mutually agreeable.

This first and most intense phase of fieldwork typically lasted 2-4 months, depending on the number of families under study and the schedules of the members. A fieldworker usually spent four complete days with each family member, resulting in between 140-170 hours of contact time. This first phase of fieldwork focused on the lives of individual family members (although they were often physically or virtually co-present). The second phase focused on more collective “family” activities. The fieldworker often began this phase by arriving at the family home when one or more family members had arrived after school, work or errands. He or she joined the family for dinner and after dinner activities, such as completing homework, attending meetings (e.g. Cub Scouts), watching television or playing video games. The fieldworker also scheduled time with the family on weekends in order to observe activities ranging from running errands or performing chores, to hosting baptisms or family reunions. In addition, the individuals were asked to think about activities or events that expressed something important or distinctive

about their family, and to notify the fieldworker when an appropriate opportunity to participate-observe arose. This phase concluded after about two months, although some significant activities or events were often not observed until much later (or sometimes, earlier).

Finally, we remained in touch with family members for another four to eight months, asking about changes in the family and the work routines of its members, and visiting to capture important activities or events. Phone calls and emails were used to keep up with the family, sometimes augmented by monthly lunches or coffees. Indeed, the fieldworkers remain in touch with most families, some of whom have been assimilated into their own network of friends. Although not a formal part of the research design, this continued contact has contributed immensely to our understanding of family rhythms and changes.

2.1.2. Recruiting the Families

Because we planned to study only twelve families, their selection was a critical issue. Statistical sampling is both impossible and inappropriate in a project such as this, and so the theoretical bases of sampling must be explicit and justified. A major goal was to maximize the variability within the sample along several dimensions. Income provides a relatively poor criterion for middle class status in a region where the median house price hovers at about \$500,000. Still, the team sought several families that articulated middle class values about lifestyle and education, but who were struggling financially to realize their aspirations. In addition, the team sought at least one family whose income and lifestyle placed them beyond the middle class, at least from the perspectives of professors at a public university.

A second dimension is loosely defined as ethnicity or ancestry. The intention here was not to seek a representative sample, since that is meaningless with such a small sample size. Instead, we assumed that a culturally diverse sample of families might increase the variety of strategies and resources used to balance work and family that we could observe during fieldwork, thereby making our analysis more robust.

Third, the team recruited families that provide a sample of workers from the public and private sectors, as well as from different industries. In addition, we tried to select some families with parents who hold similar jobs and others whose jobs are dissimilar.

Recruitment was a time consuming and difficult task due to the intensive nature of the fieldwork and the duration of the study. The PIs adopted several strategies to publicize the project and to invite participation. First, we drafted advertisements to run repeatedly in several newspapers directed at parents in the San Francisco Bay Area. Several families were recruited through such means. Second, we prepared advertisements to be run in several newspapers targeted at specific ethnic or religious communities. Developing this publicity was a time consuming and iterative process. For example, finding Vietnamese-American families who would participate required extensive efforts by Freeman over four

months, culminating in a successful advertisement that appeared in a Vietnamese-language newspaper. Third, the team was aggressive in seeking opportunities to speak about its research in general, and then using such events as opportunities to recruit potential families. For example, several speeches facilitated the distribution of fliers that ultimately found their way into the hands of someone interested in the project. Fourth, we produced and mailed a newsletter at our own expense that updated the interviewees from our Work, Identity, and Community in Silicon Valley (WICSV) Project about the status of that research. The newsletter also requested assistance in identifying potential families for the Sloan-funded research. This strategy was strikingly unproductive, and so most of the participating families turned out to be complete strangers to all members of the team prior to their agreement to participate.

Inquiries about the project arrived by e-mail, telephone and through face-to-face meetings. They ranged from a few casual comments to well prepared cases advocating for a family. Since inquiries were so heterogeneous and ambiguous it is difficult to enumerate them, but we estimate that we responded to over 200 inquiries. In some cases people simply wanted to vent frustration at their own pace of life and they acknowledged they did not even meet the criteria for participation (e.g. they had no children or a spouse was not employed). Others met the criteria, but they stated that they were not willing to participate fully since to do so would introduce an additional burden that might cause their families to implode.

A member of the team handled each inquiry so that (ideally) the person responding to the initial inquiry would be the one who would ultimately be responsible for the fieldwork. In this way continuity of contact was preserved. The team member described the project and sought to determine if the family in question included a dual career middle class couple. Then he or she described the nature of the fieldwork in order to eliminate those families and individuals that believed that participation just consisted of answering a survey, an all too common misunderstanding. If the family met the criteria to participate (including the sampling strategy) and remained interested, a meeting was scheduled with either the person who initiated contact or with the entire family. No family was allowed to participate without a meeting between the fieldworker and all family members.

Recruitment to participation was thus far from simple, easy and direct; after all, only a small minority of inquiries resulted in participating families. Many families were initially interested but they subsequently decided that they were too busy or under too much stress to allow such an intrusion into already hectic schedules. Sometimes one person strongly advocated participation, but others were indifferent or even opposed. And in still others, it was impossible to obtain all the necessary permissions in order to proceed. Participation thus necessitated a sequence of decisions by family members followed by agreements from schools, childcare providers and employers, as well as favorable assessments by the project team.

Family members reportedly participated for one or more reasons. First, many people were familiar with traditions of empirical research through their education or job.

They valued such an approach to social issues and contrasted it with the often-unsupported pronouncements they encountered in the media. Some were especially fascinated by the idea of ethnography and want to experience it first hand. Second, people were often sympathetic to the project goal of better understanding how middle class families try to balance or juggle the demands of work and family. They believed that the topic was important yet overlooked, and they viewed participation as a way to contribute to society. Third, most families had at least one person who viewed participation as a way of reflecting upon their own families. They were proud of their families and sought ways to improve coping with complex responsibilities. Although the team made it clear that therapy was not forthcoming, members of some families sought to use their participation as such. Finally, some individuals recognized the importance of the project and wanted to make sure that families of their ethnicity or ancestry were included in it.

2.1.3. Fieldwork

The team largely conducted the research as planned, adapting the fieldwork strategy to individual circumstances. As planned, the project took the form of classic anthropological participant-observation. Sometimes participation dominated, as a fieldworker joined a family at a party, Easter egg hunt, or holiday dinner. At other times, especially while a family member was at work or school, observation dominated. The interplay of participation and observation was extremely fine grained. For example, laws and occupational, professional or organizational policies and practices sometimes constrained fieldwork, as when English-Lueck shadowed a pair of attorneys or Darrah a fireman. In the former, English-Lueck could not be present during client meetings, nor could she have access to client materials. In the latter, Darrah was always instructed where to stand and what to say to observers who did not understand his role. In neither case, were Darrah and English-Lueck invited to participate in the work of litigation or fire fighting. Yet the balance could suddenly shift from observation to participation. Darrah, for example, shadowed someone at a corporate board meeting and was asked to sign a non-disclosure agreement and admonished to remain silent, but within thirty minutes board members solicited his opinions about the organization of the company. Thus, participant-observation often had a roller coaster quality of oscillations between involvement and detachment, coolness and intimacy, and informality and formality.

The basic output of fieldwork was field “jottings” made in several ways. Ideally, the fieldworker made jottings with a laptop computer or mobile field device (e.g. Hewlett Packard Jornada), but he or she might have to switch to a steno book under some conditions. For example, the electronic devices were difficult to use while in automobiles or while walking around, and they could make people uncomfortable in some settings (e.g. meetings with supervisors, religious services, etc.). Whatever the form, field jottings had to be converted into word-processed field notes, a chore that could take almost as many hours as the original observations (especially when working from hand written notes). All field jotting have been converted into more legible field notes that serve as the basis for analysis and publication.

Fieldwork proceeded largely as planned, although two modifications were made to the original design: the addition of two “mini-families” and use of exit interviews. Regarding the former, the team met the original commitment to observe a dozen families and as the two-year project became more focused, the number of contact hours with the final three families was reduced and two additional families were added to the sample. The total number of contact hours remained the same (about 2300), but we were able to explore particular issues in more depth by incorporating these new families. Regarding the latter, the project was conceptualized as an observational one, but family members repeatedly commented upon their own actions, thus introducing brief *in situ* “interviews.” The team then decided to formalize this process by conducting exit interviews with each family member. Each one to two hour interview was tape recorded and transcribed as part of the family’s field notes.

The three PIs remain in touch with most of the families who participated in the study, regularly checking on changes in their lives. Indeed, one reason we can only approximate the number of fieldwork hours is that our relationships with the families have themselves changed. In some cases the end of formal fieldwork ended the relationship, but in most cases it simply marked a transformation of the relationship into something different that is difficult to categorize as fieldwork or friendship.

2.2. Participating Families

Due to the intensive nature of the researcher’s involvement, recruitment of families was staggered. Twelve families were recruited for full participation in the project and two additional “mini-family studies” were added to refine our understanding of specific issues. The families are listed below; all names are pseudonyms.

Family #1: Flaherty

Ethnicities/Ancestries: European-American

Fieldworker: Darrah

Family #2: Jackson

Ethnicities/Ancestries: European-American

Fieldworker: Freeman

Family #3: Le

Ethnicities/Ancestries: Vietnamese-American

Fieldworker: Freeman

Family #4: Schwartz

Ethnicities/Ancestries: European-American, father is ethnically Jewish; mother is convert to Judaism

Fieldworker: English-Lueck

Family #5: Scott

Ethnicities/Ancestries: European-American.

Fieldworker: English-Lueck

Family #6: Smith

Ethnicities/Ancestries: African-American, Panamanian

Fieldworker: English-Lueck

Family #7: Tentori

Ethnicities/Ancestries: European-American

Fieldworker: Freeman

Family #8: Tran

Ethnicities/Ancestries: Vietnamese-American.

Fieldworker: Freeman

Family #9: Carson-Klein-Rodgers

Ethnicities/Ancestries: European-American, strong Germanic heritage for the Klein branch.

Fieldworker: English-Lueck

Family #10: Allen-Rodriguez

Ethnicities/Ancestries: Husband is European-American and wife is Mexican-American

Fieldworker: Darrah

Family #11: Mendoza-Jones

Ethnicities/Ancestries: Husband's parents are from El Salvador. Wife's mother is European-American and her father is African-American. She does not identify as African-American.

Fieldworker: Darrah

Family #12: Carlsberg

Ethnicities/Ancestries: Husband is European-American (German ancestry). Wife was born in Italy and moved to U.S. as a young child with her mother and sister.

Fieldworker: Darrah

Family #13: Mohan

Ethnicities/Ancestries: Husband and wife were born in India and immigrated to U.S. as young adults.

Fieldworker: Darrah

Family #14: Hopkins-Johnson

Ethnicities/Ancestries: Husband is Australian citizen who moved to U.S. upon marriage to wife, an U.S. citizen of European ancestry. One young child has dual citizenship.

Fieldworker: Darrah

2.3. Dissemination

Dissemination of project findings has been shaped by the team's lack of access to a graduate program: we are unable to disseminate methodology and findings through the familiar mechanism of training the next generation of scholars. However, the team has aggressively pursued available opportunities to disseminate project findings. One set of opportunities consists of participating in a variety of professional conferences and workshops, and making presentations to civic and professional organizations. The team has been especially active in sharing methods, experiences and results within the community of Alfred P. Sloan Centers for the Study of Working Families. A second set of opportunities consists of reports and publications. Here the team has focused its effort on preparing a book length manuscript that presents a rich ethnographic account of the lives of dual career middle class families. The team has also integrated this research into its Silicon Valley Cultures Project web site, which has allowed information about it to be disseminated in 52 countries. Finally, the team has made itself available to journalists in the U.S. and abroad who are either preparing stories about work and family, or who have heard about this project in particular (typically through the web site). Indeed, a conviction of the team is that anthropologists must make their work relevant and visible to a broader public if the discipline is to remain vital. We have attempted to enact that conviction in our relationship with the media.

References to articles about the “umbrella” Silicon Valley Cultures Project, facets of life in Silicon Valley derived from the Work, Identity and Community in Silicon Valley Project, and the Alfred P. Sloan Foundation-funded project on dual career middle class families can be found in SVCP Media Page.

2.3.1. Conferences, Presentations and Workshops

Presentation. “Ethnography and Thinking About Dutiful Occasions” (Darrah and English-Lueck). Presentation at Dutiful Occasions: Working Families, Everyday Lives Conference. Alfred P. Sloan Foundation annual conference of Centers for the Study of Working Families. Ann Arbor, MI: May 3-5, 2001.

Presentation. “The Dutiful Dance: Scenes from the Ethnography of Silicon Valley Families” (English-Lueck and Darrah). Presentation at Dutiful Occasions: Working Families, Everyday Lives Conference. Alfred P. Sloan Foundation annual conference of Centers for the Study of Working Families. Ann Arbor, MI: May 3-5, 2001.

Presentation. “Seeing Families Through Technology” (Darrah and English-Lueck). Seminar presentation at Alfred P. Sloan Center for Working Families, University of California. Berkeley, CA: October 20, 2001.

Expert Participants: “Emerging Households Workshop” (Darrah and English-Lueck). Institute for the Future. Menlo Park, CA: March 16, 2001.
Colloquium. “The Silicon Valley Cultures Project” (Darrah, English-Lueck, Freeman). PARC Forum, Xerox Palo Alto Research Center. Palo Alto, CA: March 15, 2001.

Presentation. “Technology and Culture Creation in Everyday Life” (Darrah). Globalization, Trade and Culture Conference, Canadian Studies Program, University of California. Berkeley, CA: March 2, 2001.

Presentation: “Work and Family in Silicon Valley” (English-Lueck). Professional Business Women of California. San Jose, CA: February 14, 2001.

Presentation. “Experiencing Silicon Valley as Technopole” (Darrah). Berkeley Center for Globalization and Information Technology Lecture Series. Berkeley, CA: February 1, 2001.

Presentation: “Silicon Valley’s Difference Engine” (English-Lueck). National Conference for Community and Justice Board Retreat. San Jose, CA: December 1, 2000.

Keynote Speaker: “Living in a High Tech Society” (English-Lueck). University of California, Santa Cruz, Crowne College. Santa Cruz, CA: November 20, 2000.

Invited Session Organizers: “Doing Good: Work as Mission in Silicon Valley and Beyond.” American Anthropological Association annual conference. San Francisco: November 17, 2000.

Paper: “Silicon Missionaries and Identity Evangelists” (English-Lueck and A. Saveri). American Anthropological Association annual conference. San Francisco: November 17, 2000.

Paper: “Techno-Missionaries Doing Good at the Center” (Darrah). American Anthropological Association annual conference. San Francisco: November 17, 2000.

Paper: “Work as Mission in an Immigrant Community and its Homeland” (Freeman). American Anthropological Association annual conference. San Francisco: November 17, 2000.

Panel Participant. “Bridging Academic Research to Workplaces: Questions for the Future” (Darrah). Boston College Center for Work and Family 10th Celebration and Roundtable. Boston: October 20, 2000.

Panel Participant. [WWW.WORK+LIFE](#) (Darrah). Boston College Center for Work and Family and Fast Company Magazine. Boston: October 18, 2000.

Participant. "Setting the Research Priorities for Studies of Device-Mediated Mobility" (Darrah and English-Lueck). EC2 Incubator, University of Southern California. Los Angeles: June 21, 2000.

Presentation. "The Art of Living Fast in Silicon Valley" (AKA "The Artlessness of Getting By") (Darrah). Strategos Institute: Revolutionaries Conference. San Jose, CA: June 14, 2000.

Colloquium. "The Daily Toolkit in Silicon Valley" (Darrah, English-Lueck and Freeman). Center for Science, Technology and Society, Santa Clara University. Santa Clara, CA: April 4, 2000.

Panelists. "The Silicon Valley Cultures Project" (Darrah, English-Lueck, and Freeman). KQED Public Television Digital West television program. San Francisco: March 20, 2000. This locally produced PBS television station presented a show that was dedicated to the research we have conducted in the region.

Presentation. "Work and Family in Silicon Valley" (English-Lueck). Global Innovations Forum, Institute for the Future. Palo Alto, CA: March 16, 2000. English-Lueck spoke to an international audience, mostly from Nordic Europe, who were primarily concerned with establishing their own local research agendas as informed by our work.

Paper. "Living in the Eye of the Storm" (Darrah, English-Lueck, and Freeman). Alfred P. Sloan Center for Working Families and Business and Professional Women's Conference. San Francisco: March 4, 2000.

Presentation. "Creating the Personal Through Daily Life" (Darrah). Human Centered Product Innovation Conference, Intel Architecture Labs, Intel Corporation. Hillsboro, OR: January 20-21, 2000.

Workshop. "Working with Working Families in Middle Class America" (Darrah, English-Lueck, and Freeman). American Anthropological Association Annual Conference. Chicago: November 20, 1999. The methodological workshop was organized with Tom Fricke (University of Michigan) and was fully subscribed. It was sponsored by the Society for the Anthropology of Work and the Society for the Anthropology of North America. Feedback from participants was extremely positive.

Panelist. "Future Issues" (Darrah). Emerging Issues Forum: The Role of Information Technology in Understanding Global Sustainability, The Nature Conservancy. Washington, DC: November 4, 1999. Much of the presentation was based on the fieldwork conducted with dual career families.

Workshop Participant. “Social Norms, Personal Values, and the Use of Interactive Information Technologies by Young People Workshop” (English-Lueck). National Science Foundation. Eugene, OR: September 17-18, 1999. The conference was to establish a research agenda for a new NSF initiative on conducting research on young people and technology. The methodology of our ethnographic study of dual career families and our findings on children and technology contributed to the workshop.

Webcast Virtual Panelist. “Time” (Darrah). ABC Nightline “Brave New World” Series. Sponsored by Forbes ASAP, Forbes.Com, and ABC News Nightline. July 27, 1999

English-Lueck and Freeman met with Phillip Gotanda, San Jose Repertory Theater playwright, to collaborate on creating a play that reflects the lives of workers and families in Silicon Valley.

2.3.2. Reports and Publications

Book Preliminary Prospectus: Darrah, C. N., J. A. English-Lueck and J. M. Freeman. *Families in the Eye of the Storm: Dilemmas, Dreams and Strategies*. Preliminary prospectus for “crossover” book about the ethnography of dual career, middle class families to be submitted to publishers.

Book Prospectus: Darrah, C. N. and J. M. Freeman. *Remaking Everyday Life: The Hidden Innovations of Silicon Valley*. Prospectus for “crossover” book about Silicon Valley as a site for innovation in everyday life. The book explores how the cultural domains of work, person, learning, community and family intersect. A central argument is that family becomes the central site in which technological, social and ideational changes are discussed, enacted and evaluated. The book is being written under contract to Palgrave Press and will be completed by February 1, 2002.

Book: *Cultures@Silicon Valley* (English-Lueck). Stanford, CA: Stanford University Press, in press/2002. Although this book does not directly emerge from the project funded by the Alfred P. Sloan Foundation, it was informed by its underlying research questions and a preliminary assessment of the data. It addresses the question, “What is the difference that culture makes?” Set in Silicon Valley, the icon for a lifestyle saturated with digital devices, this is the first of three books by members of the Silicon Valley Cultures Project about the region. Most such books focus on Silicon Valley’s entrepreneurial reputation, but this book is the result of an anthropological expedition into the everyday lives of people living in and connected to Silicon Valley. These people use technology to create cultural realities and transform their cultural identities into tools. The region is not only a bellwether of technological research and production, but a laboratory for the creation of a

complex society. Within schools, workplaces and homes identities emerge, engage, erode, transform and are recreated to coalesce into a larger community of communities. The two strands of technological saturation and identity complexity intertwine to produce many different choices. These choices play out in how technology is used, work is done, community is made and family is lived.

Working Paper: Darrah, C. N., English-Lueck, J. A., and Freeman, J. M. "Blurring the Domains of Work and Family." Center for the Ethnography of Everyday Life, University of Michigan, Ann Arbor, MI. In preparation.

Guest Editor: English-Lueck edited a theme issue of *Anthropology of Work Review*, Spring 2001. Darrah, English-Lueck and Freeman all contributed articles drawing on observations of work and family to discuss how meaning is constructed in the region's high-tech sector.

Article: Darrah, C. N. "Techno-Missionaries Doing Good at the Center." *Anthropology of Work Review*. Spring 2001/in press.

Article: English-Lueck, J. A. and Saveri, A. "Silicon Missionaries and Identity Evangelists." *Anthropology of Work Review*. Spring 2001/in press.

Article: Freeman, J. M. "Work as Mission in an Immigrant Community and its Homeland." *Anthropology of Work Review*. Spring 2001 edition/in press.

Chapter Reproduction (2000): "Living with Technology" (Darrah, English-Lueck and Freeman). In *Anthropology and Middle Class Working Families: A Research Agenda*. Edited by M. M. Overbey and K.M. Dudley. American Anthropological Association. Washington D.C. Originally in the American Anthropologist Newsletter in December 1998.

Chapter: "Technology and Social Change: The Effects on Family and Community" (English-Lueck). In *Gone Today, Here Tomorrow: Millennium Previews, Best of Australian Business Network Report 1997-1999*. Richard Slaughter Ed., St. Leonards, NSW, Australia: Prospect Media, 2000.

Paper. "Living in the Eye of the Storm: Controlling the Maelstrom in Silicon Valley." Work and Family: Expanding the Horizons conference. Sponsored by The Business and Professional Women's Foundation, The Center for Working Families at the University of California, Berkeley, and the Alfred P. Sloan Foundation. San Francisco, CA, March 4, 2000. This paper summarizes the preliminary findings of the project and identifies strategies by which families attempt to manage the intersection of work and family.

Invited Article: Darrah, C. N., English-Lueck, J. A. and Freeman, J. M. (1998). "Living with Technology." *Anthropology Newsletter* (39(9) December, pp. 1, 4. This article was solicited by the American Anthropological Association and is included in the "What is Relevant about Anthropology?" series in the AAA Anthropology Newsletter.

Article Reproduction: "Technology and Social Change: The Effects on Family and Community" (English-Lueck). Consortium of Social Science Associations Congressional Seminar (sponsored by the Ford Foundation). Reprinted in the *Wills and Probate Bulletin* (Melbourne, Australia), Volume 13, 1998.

Article Reproduction: "Technology and Social Change: The Effects on Family and Community" (English-Lueck). Consortium of Social Science Associations Congressional Seminar (sponsored by the Ford Foundation). Reprinted in the *Australian Business Network Report on Learning, Leadership and the Future*. Vol. 6, Number 8, September/October.

Report: "2000 Report to the National Science Foundation on Work, Identity and Community in Silicon Valley, Award #9810593" (English-Lueck, Darrah and Freeman). Described project activities and findings for a community-wide ethnographic study of Silicon Valley that formed the foundation of the project subsequently funded by the Alfred P. Sloan Foundation to study dual career middle class families.

2.3.3. Media Coverage and Web Presence

The team receives many requests for information and assistance from journalists. We believe that this provides another venue for disseminating information about the project beyond academe. However, many journalists blend together our Work, Identity and Community in Silicon Valley Project with the Alfred P. Sloan Foundation-funded project on dual career middle class families. We impress upon journalists the differences between the two and note the support we are receiving from the Alfred P. Sloan Foundation, but it is the journalist who ultimately writes the story.

The reader is encouraged to review SVCP Media page for a full listing of articles and reports about the project. Selected/abridged items of interest in English are listed below.

- The Silicon Valley Cultures Project has been mentioned twice in support of National Science Foundation appropriations. The congressional testimony of Mary Margaret Overbey is notable for its mention of the Alfred P. Sloan Foundation's participation in the project. (See <http://www.aaanet.org/gvt/nsffy2002.htm>).

- English-Lueck's presentation, "Effects of Technology and Family and Community," at the June 19, 1998 Congressional Seminars, Consortium of Social Science Associations (COSSA) has been widely reprinted and reposted in e-zines, departmental and course websites, etc.
- The project has been noted in the Anthropology Newsletter in articles such as "Anthropologists Address Information Technology for Congress" and "Relevance of Middle-Class Working Families."
- The Silicon Valley Cultures Project was featured in "The Silicon Tribe," part of a series on the region in New Scientist. The article was translated and reprinted in the Italian magazine, Liberal.
- An article in The Wall Street Journal (April 14, 1999) described the project on dual career middle class families under the cute title, "Here's a Study That Paranooids Should Avoid."
- Another feature article in USA Today (May 26, 1999), "It's about Time and Tech: Families Learn to Live on 'Internet time'" was widely reprinted, translated and reposted. The article focused on our research in Silicon Valley and how families adapt to the rapid pace of change.
- The Chronicle of Higher Education (October 1, 1999) ran a feature article on the Silicon Valley Cultures Project: "Anthropologists Exploring Silicon Valley Find 'the Best, the Brightest, the Greediest'"
- An article describing the study of dual career middle class families (October 14, 1999) appeared in the Los Angeles Times and then was widely reprinted in newspapers including Pittsburgh Post-Gazette, St. Paul Pioneer Press, Detroit News, Dallas Morning News, Fort Wayne Journal Gazette, Denver Post, Baltimore Sun, Portland Oregonian, Austin American-Statesman, Bismarck Tribune, and Miami Herald.
- English-Lueck was a panelist on the locally produced public television show, Digital West (February 18, 2000). The theme of the episode was "Valley of Gold."
- The New York Times ran a story (November 16, 2000) about the session English-Lueck and Darrah organized at the 2000 American Anthropological Association annual conference: "Anthropologists Study 'Silicon Culture'." It was widely reprinted and reposted.
- The Christian Science Monitor (November 27, 2000) ran an article about the study of dual career middle class families: "If it's Tuesday, I must be the 'relevant parent'."

- English-Lueck and Darrah gave five-minute interviews to eleven Canadian Broadcasting Company radio stations.
- The project was the subject of the May 20, 1999 Charles Osgood segment on CBS national radio.
- Darrah and English-Lueck were interviewed about the Silicon Valley Cultures Project for the BBC radio show, “Insight.” Discussion included the project on dual career middle class families.

2.3.4. Other

The team has also explored a wide variety of other ways of disseminating project findings.

- The team met with researchers at Intel Corporation to discuss project implications for product and service development. Our interest here lies in product development that is based on how people actually live their lives and what would make their daily logistics and coordination easier. No follow-on discussions have been held.
- The National Conference for Community and Justice and the San Jose State University Institute for Social Responsibility, Ethics and Education are tentatively sponsoring a yearlong seminar on community and justice at San Jose State. The seminar will bring together faculty, community and corporate leaders to discuss a series of questions that are derived from our research on Silicon Valley, especially that sponsored by the Alfred P. Sloan Foundation. A goal is to develop a research agenda for diverse disciplines and fields that want to better understand the implications of the “new economy” for communities. We have been invited to be “founding members.” The program is awaiting funding, but will tentatively begin spring 2002.
- Darrah served as advisory board member for the “Women of Silicon Valley” project being coordinated by Collaborative Economics in Palo Alto, CA. Partners include Community Foundation of Silicon Valley, Technology Network, Career Action Center, Cisco Systems, Solectron, Sun Microsystems and Applied Materials. Darrah participated in advisory board meetings, with special emphasis on framing research questions and sharing findings/insights from a decade of local research. The project culminated in the April 2001 report, “Unfinished Business: Women in the Silicon Valley Economy.”
- English-Lueck was appointed to the History San Jose Advisory Board to consult with exhibition and educational staff about the representation of anthropological topics, particularly work and family life in Silicon Valley.

- Darrah met with representatives of ATT Broadband to discuss implications of the research for product development. The purpose (and result) of the meeting was similar to the meeting with Intel Corporation.
- Freeman is Chief Advisor to TechnoVisa, a global high tech start up company. His role is to study and report on how immigrant/refugee families take on American (and specifically, Silicon Valley) business values and how the families export these values to their ancestral homelands.
- Darrah and English-Lueck are collaborating with the Institute for the Future on a research project that builds upon insights gained from the ethnography of dual career families. Specifically, the latter project sensitized us to the impact of changes in work and family on children, their use of information technology, and (especially) their theorizing about their own lives and futures. The IFTF collaboration allows us to study the social networks of samples of 13-27 year olds living in Silicon Valley, London, Tokyo and Nordic Europe. The goals are to discover the structure of these networks; how they both are maintained and altered; and their uses in the everyday lives of youth.
- Darrah and English-Lueck are developing an undergraduate major course on family, work and community (Anth 100).
- Darrah collaborated with the Institute for the Future (Menlo Park, CA) and Junior Achievement of Santa Clara County on a fall 2000 research project that explored the everyday lives of middle and high school students, how they engage information technology, and their ideas about work and careers. Students enrolled in Darrah's Anth 149 Ethnographic Methods course worked with the two institutional partners and three schools to conduct interviews with a sample of youth. The results were reported in "Students, Technology and Everyday Life," an April 2001 report to Junior Achievement Santa Clara County and the Institute for the Future.
- The team prepared an inquiry for a social project to be held at the Center for the Advanced Study of the Behavioral Sciences at Stanford University. The goal of this endeavor was to develop a research agenda for studying families and work in communities characterized by high technology industries. The proposed agenda was both long term and cross-cultural. The Center requested a fuller proposal, which was submitted and ultimately rejected. Various reasons were given, but we believe that the fact that we work in a single department at the same university poses an insurmountable barrier to obtaining Center support. However, the team plans to propose a similar gathering at another site within the next few years.

3. Project Assumptions, Categories and Questions

This project began with a set of assumptions and questions about dual career middle class families that were based on a review of the literature and our own previous research in the Silicon Valley region (Work, Identity and Community in Silicon Valley). This conceptual starting point was presented in the grant proposal and it is worth revisiting at this time. Specifically, we assumed:

1. Although work can be characterized by some significant general trends, it is specific characteristics of work, jobs and careers that affect individual families. Accordingly, these specific characteristics must be incorporated into analyses of the work-family intersection. In our previous work we found broad consensus that work is affecting family, but the specific effects are extremely heterogeneous. For example, some interviewees focused on the practical, logistical constraints of work (e.g. hours, travel, locations, interruptions), while for others it was the inability to “shut off” work as an internal dialogue with the world, including family.
2. Just as the specific characteristics of work matter, so do the specifics of family life. The specific and idiosyncratic needs, interests and schedules of children, other family members, and friends profoundly affects work and careers. For example, in families with two career builders, each might be reluctant to constrain the work habits of the other since the shoe may soon be on the other foot. If only one of the partners pursues a career, the other often acts as the monitor of work habits, alerting their partner when their work habits threaten family life.
3. How work affects family and home life is difficult to measure. Number of hours worked is useful only as proxy for those effects. For example, our interviews indicated that people bring models and metaphors from the workplace into family life. Talk about efficiency and productivity, various techniques to manage interpersonal relationships, and management tools such as total quality management can thus penetrate family settings.
4. Despite the relative emphasis in the scholarly literature and mass media (and by our interviewees) on the impact of work upon family, much from family and community life is imported into the workplace, too. Assumptions and values about proper relations between the genders; the relationship between family and work; and the responsibilities of superiors and subordinates may be forged largely by family life. These may vary by cultural background, and they may be striking in multi-cultural workplaces marked by work processes requiring close interactions among people in order to accomplish collective goals.
5. Families differ in how they manage the often-conflicting demands of family and work life, but all interviewees (who had local families) reported that such management takes a significant amount of time and effort. These work/family issues

are seldom satisfactorily resolved, they change at different stages of family and work life, and they often drive hidden social innovations in families.

6. The effects on children of family-work management strategies are often unexamined or they are reduced to gross indicators such as providing “quality time.” The more subtle effects of allowing the household to be penetrated by demands for “accessibility” or the incorporation into childhood of work-based rhythms, metaphors, and models are seldom noted by our interviewees, but they could be inferred from their stories about work and family.

This set of propositions itself reflects our own deeper assumptions about work and family, and how their intersection can best be studied. Specifically, it presupposes that work and family constitute clear and distinct cultural domains that are separable from each other, as well as other cultural domains.

Regarding work, it assumes that work, jobs and careers are characterized by objective characteristics that can be used to describe them and their effects upon families. Equally important in this framing of the work-family intersection is the insignificance of distinguishing between what people *do* at work (work practices) and how they *talk* about it (work narratives). It follows that descriptions of work practices are not fundamentally different from observations of action taken in the workplace. What people do is what they say they do, although they might necessarily forget to mention some details of their practices.

Regarding families, it assumes that “family” is a clear cultural domain and specific families have clear boundaries around them so that determining what or who constitutes a family is a simple descriptive chore. Artifacts, people and ideas are imported and exported between the domains of work and family, and their movements are fairly easy to follow. Tracing these flows of things gets at the heart of the relationship between a specific family and the work of its members. It follows then that what drives the characteristics of specific families is largely external to them. The family reacts to the flows of artifacts, people and ideas from other domains, including work, and so a basic challenge for the family is to manage obligations imposed by external “others.”

Finally, this initial framing of the research problem tacitly assumes that demands of jobs and careers create problems for families. Furthermore, these problems are the primary impact of work upon family, and the idea that work might also provide solutions is not articulated. At an even deeper level, this framing implies that family is basically good, albeit buffeted by the exigencies of work.

This initial framing of the intersection of work and family provided a useful heuristic for initiating fieldwork with the specific families. However, ethnographic fieldwork typically involves much more than simply finding confirming or disconfirming evidence for a set of hypotheses. Instead, a goal is to develop a deeper understanding of the research questions by a process of engagement with people in the field. In the present project, this process

took the form of exploring how family members defined and used the familiar categories of work and family in their own lives. What each fieldworker encountered was a rich and complex reality that, not surprisingly, challenged initial assumptions and allowed the team to refine its assumptions and questions.

4. Fieldwork and the Analytical Framework

After developing our initial conceptual framework we began fieldwork. The process of fieldwork affected the two ultimate outcomes of the project. First, it challenged our original assumptions, categories and questions. This is typical with ethnographic fieldwork: developing ways to reframe the research questions in order to produce new insights is a fundamental reason for using the methodology. Accordingly, the team developed a more refined analytical framework that incorporated preliminary findings and original questions. This analytical framework is thus one important product of the project.

Second, the fieldwork allowed the team to collect descriptive data about dual career middle class families. These data themselves are diverse. They include detailed observations of the minutiae of everyday life that are the object of management efforts by the family. Yet they also capture the significant events and issues that unfold over weeks or months, and that are invisible to shorter periods of observation. They incorporate *in situ* commentaries by family members about their activities, which allows us to assess their salience to the individual and other people. They include information that is only gleaned when there is a relationship of trust and mutual respect built up over time between fieldworker and family. Collectively, these data reveal patterns in the relationships between work and family that would otherwise remain obscure.

Experiences in the field immediately challenged the project's initial conceptualization, especially the clarity of work and family as distinct cultural domains. Instead the team was struck by the blurring of these domains so that distinguishing what was work and what was family proved difficult. Examples of this blurring are legion.

- A woman sits in her cubicle ("cube") shopping for a gift for a special friend. The search takes an hour and the fieldworker asks her if she does other shopping from her cube, such as ordering groceries from the (now bankrupt) Internet grocer, Webvan. She is shocked at the suggestion and explains that it would be a violation of her employer's trust since that purchase is a regular one for what are clearly household goods. Then the fieldworker asks why she suddenly switched from a desktop to laptop computer. She explains that the company's desktop is the one she usually uses. But she is enrolled in a graduate program at a regional university and cannot gain access to its library because of the firewall her company installed to protect the computer. She explains that she first connected her laptop to the telephone to use the library, but when she did so her "customers" (all located within her building) could not reach her by phone. She then asked a friend in Facilities to install another

phone line. He agreed and so she now has an official and a “gray” phone line. She does not know who receives the bill for the second line. She explains that being accessible and working on her graduate degree whenever she can (including on company time) are parts of being a conscientious employee with a good reputation.

- A woman explains that her job is fairly routine and simple, and that is just how she likes it. Her family is large and complex, and someone is always having health problems of one sort or another. For example, when the fieldworker asked about her New Year’s Eve celebration he was told that a young niece had died suddenly of a brain aneurysm and that an uncle had suffered another stroke. Something, she said, was always happening, but she expected that the fieldworker had already figured that out. So, she explained, work was the place without stress where she relaxed and simply did her job. Lunch hours were non-existent: They were occasions to run errands and move kids to their next destinations. Her family was where the stress was, and it was also really her work and her career.

Stories like these abound in our fieldwork and they suggest that the domains of work and family are far from discrete, and that causal relationships between them are difficult to explicate. Practices we had seen in the workplace were brought into the home, and *vice versa*. Sometimes people could not tell if an activity was about work or family, and they finally concluded it was both simultaneously. Thus, while the basic questions that framed the project continued to guide fieldwork, a more refined analytical framework emerged through the PIs’ discussions and meetings. This framework guided both further fieldwork and it continues to inform our analysis and publication agenda.

The revised framework is built from five basic elements. It reflects both the original research questions and the experiences we encountered during fieldwork. It is useful insofar as it allows us to both address those original questions and to go beyond them to develop what we hope is a deeper and more sensitive analysis of dual career middle class families. The framework rests upon the practices and narratives that we encountered from different family members. We both describe those practices and narratives, the constraints upon them, and the relationships between them. This allows us to then examine three clusters of questions. First, we explore the material infrastructure that allows family members to act and create their accounts, regardless of whether these are “work” or “family.” Second, we explicate the social and technological networks that extend from and connect the domains of work and family. Finally, we trace the processes by which family members create individual and collective identities as family members and workers. This approach allows us to avoid the analytical pitfall of assuming that family and work are similarly “real” and meaningful to each family member and the analysts. Instead, we focus on practices and narratives that can seemingly flow across the familiar domains of work and family. What constitutes these domains for specific families thus becomes an empirical task, not one that analysts or policy makers can take for granted.

The revised conceptual framework is stated as the following set of questions:

1. Work/Career and Family Practices and Narratives

- What are the work practices and how are they related to the work narratives?
- What are the family practices and how are they related to the family narratives?
- What are the work practices and how are they related to the family practices?
- What are the work narratives and how are they related to the family narratives?
- What are the work practices and how are they related to the family narratives?
- What are the family practices and how are they related to work narratives?

2. Work/Career and Family Constraints

- What are the etic (i.e. knowable to a community of external scholars) characteristics (e.g. work locations, hours, relations to clients, projects, crises, organizational policies, etc.) of the jobs and careers in specific families?
- What are the etic characteristics (e.g. size of family and their relationships, health status/medical conditions, educational obligations, etc) of the family and the non-work related parts of its members lives?

3. Infrastructure

What is the hidden infrastructure of technology, activities and ideas that allows people to choose, behave, and think about work/career and family in the way that they do? How is this hidden infrastructure distributed among the workplaces, public spaces and households that family members engage? How do different people within the families conceptualize the hidden infrastructure?

- How does the hidden infrastructure of technology, activities and ideas at work allow people to choose, behave, and think about the jobs/careers in the way that they do?
- How does the hidden infrastructure of technology, activities and ideas at work allow people to choose, behave, and think about their family(ies) in the way that they do?
- How does the hidden infrastructure of technology, activities and ideas in their family allow people to choose, behave, and think about their family(ies) in the way that they do?

- How does the hidden infrastructure of technology, activities and ideas in their family allow people to choose, behave, and think about their jobs and careers in the way that they do?

4. Networks and Relationships

What are the social and virtual networks that are available to family members and that connect the domains of work and family?

- What are the characteristics of these networks? Specifically, what are their “sociocentric” elements that are relatively permanent and that exist independently of the actions of the family member? What are their “egocentric” elements that are relatively transient and that largely exist through the efforts of a family member?
- How do family members use different media to create and maintain these networks?
- How do these networks emerge from work and career activities and relationships?
- How do these networks emerge from family and community activities and relationships?
- How do family members gain access to and use these networks?

5. Identity

How do people create definitions of their careers, jobs and families, and how do those definitions affect the relationship between work and family?

- How do people define their job responsibilities and themselves as workers in the context of their family responsibilities?
- What is defined as core or central to the definition of job and career, and what is defined as variable or peripheral?
- Under what conditions do these definitions remain constant and change?
- How do people define their family responsibilities in the context of their jobs and careers?
- What is defined as core or central to the definition of “our family” and what is defined as variable or peripheral?

- Under what conditions do these definitions remain constant and change?
- How do these definitions affect decision making about work, career and family?
- What must people consume and produce in order to have the kind of careers and jobs, and to be the kind of families they define themselves as?

5. Findings

The broadest and most significant finding of this research is that the content of “family life” is profoundly shaped by the realities of current work regimes, as well as the contours of imagined ones. Families are thus sites of cultural creation in which the domains of work, family and community are selectively incorporated, separated and synthesized. These processes profoundly affect how people define their families, what they consider to be appropriately “in” or “out” of them, and how they can navigate a landscape in which familiar guideposts are missing. In effect, we argue that families are performing new and often hidden work in society that goes far beyond formulations in which families of known form and function are buffeted or threatened by the exigencies of work. Metaphors of “juggling” or “balancing” work and family become less useful in this world since their very constituent elements become problematical.

Important implications of this analysis are that work does not simply threaten family, nor is family a refuge from the stress and strain of work. We were struck, for example, by the pervasive incorporation of devices, techniques and values from work into families. People lament the demands of work, jobs and careers because of the strains they place on their families and they simultaneously draw upon the world of work to find better ways to address myriad family problems, including those induced by their jobs and careers. The relationship between work and family in this formulation is less one of clear-cut opposition than of shifting ambiguities. Both jobs and careers and families and households drive the practices of everyday life, and they are both threat to and resource for those practices.

The specific findings are organized into five sections: practices and narratives, constraints, infrastructure, relationships, and identity. The central focus of our analysis is the existence of practices and narratives that are situated “in” neither the domains of work or family. Rather, they draw upon and connect those familiar domains. These practices and narratives result from creative acts by family members, but such creativity always exists within constraints. Each family can be characterized by a constellation of such constraints, some of which are quite general and some of which are idiosyncratic. Through their practices and narratives families create hidden infrastructures that allow people to act and believe as they do. These hidden infrastructures include material, social and ideational components. They are hidden in that people are largely oblivious to them and when they do see them it is usually from their own perspective. The material infrastructure includes

the configuring of the household and the workplace, as well as the provisioning of an information system that allows family members to be “in touch.” The social infrastructure includes relationships established through “outsourcing” important services, the construction of social networks drawn from family members, friends and co-workers, and connections to institutions such as schools that provide essential services. The ideational includes ideas about workers and family members, and more broadly, about people and how work and family produce them. It also includes ideas about the family *per se*. The ideational realm is centrally implicated as a resource through which identities for people and the family are created, negotiated and enacted.

The findings that follow are largely presented as analytical statements and conclusions with only brief illustrative examples. These findings provide the basis for a book (and articles) that will present the lengthier examples that define ethnography and its capacity to allow us to enter different ways of seeing and enacting the world.

5.1. Practices and Narratives

5.1.1. Introduction

The design of this project assumed at the outset the existence of dual career middle class families with children. Indeed, we conducted fieldwork with a sample of fourteen such families and analysis necessarily begins (but does not end) with their assumptions, values and causal models. The families we studied were sites in which practices could be inferred by the fieldworkers and which were frequently discussed by family members. Although some practices were implicit and not accessible to family members, many other practices were explicit and people identified and reflected upon them. In addition, the families were sites of talk or narratives about various recurring subjects. Narratives both concerned the nature of work, jobs, careers and industries, and the definition of the family and the responsibilities of its members. Such narratives were not always well articulated, even by a single family member. They were constructed of fragments of advice, admonitions, queries and interpretations, but collectively they comprised a master narrative that was striking to the fieldworker. In fact, elements of narratives that we encountered on the first day of fieldwork (or even during the meeting with the family prior to fieldwork) were elaborated throughout the months of fieldwork. They were often the subjects of probing during the exit interviews with the family members.

This discussion of practices and narratives is subject to several caveats. First, families were not characterized by consensus about “their” practices and narratives. Different family members participated in different ways, and the legitimacy of practices and stories was often challenged. Indeed, the team was often struck by the Rashomon quality of life in families: People accounted for the same event or activity in strikingly different, even contradictory, ways. Accordingly, fieldwork did not explicate the practices and narratives of a family, but rather the sometimes-contentious engagement of family members with each other around practices and narratives

Second, although family members typically spoke of “family” and “work” with ease and certainty, these cultural domains were actually very difficult to distinguish. Like other cultural domains, these two are useful precisely because they are public and they convey agreement and consensus about the fundamental categories by which life is organized. However, domains also permit people to speak as if there is consensus when in fact the definitions and meanings they attach to them are divergent. The fieldwork suggests that work and family are not simply separate or real domains that are then “balanced,” “juggled,” or “blurred.” That interpretation implies that work and family were or should be discrete in ways that everyone understood and that basic cultural categories have somehow become confused. It is but a short step to conclude that this cultural confusion is a problem that must be solved by putting work and family back into their proper conceptual boxes. Instead, fieldwork revealed that the intersection of work and family, however defined, generates considerable cultural creation by ordinary people.

Finally, there are analytical pitfalls in separating practices and narratives into work practices, work narratives, family practices and family narratives, even if the members of sample families sometimes did so. Instead, both practices and narratives flowed back and forth between the domains of work and family. What we typically encountered were practices and narratives that drew upon the metaphors, activities and artifacts associated with family and work. An implication is that if there are purely work or family practices or narratives, then they must empirically established case by case.

These caveats can be illustrated through the creation and display of one family’s “mission statement.” The statement was the quintessential expression of a family narrative, one intended to convey consensus and to define virtue. It was posted in the kitchen, the practical and symbolic center of family activity, and on the refrigerator, an artifact used to store food and to post important information about family logistics. It was also stored in the Palm Pilot of one family member, a device used to integrate information about work and family schedules. The very idea of a family mission statement was drawn from workplace practices and training in the book, *The Seven Habits of Highly Effective People*. Yet the process of producing the mission statement also expressed divergent interpretations of family. The wife explained that she and her husband disagreed about some principles and the result was a compromise to which neither partner subscribed in full. She had a separate personal mission statement that further sharpened the differences between what matters to her and what matters to the family. The couple’s young children were, of course, currently unaware of the mission statement *per se*, although their parents’ child rearing practices were shaped by it.

Practices and narratives are thus integrated with each other, and they both draw upon and connect the cultural domains of work and family. Seeing them as one or the other distorts their production and use by family members, and directs us away from the important analytical chore of understanding how families create and use them.

5.1.2. Chunking and Recombining

We begin with the practice of taking longer sequences of activities and decomposing them into smaller segments that can then be enacted when convenient. We call this practice “chunking,” since larger units of activity or roles become broken into smaller “chunks” that can be fit into shorter time slots available. These smaller chunks are then recombined opportunistically so that ultimately the larger activity gets done, but often with a difference. Sometimes the chunks are combined in a different sequence that depends upon the immediate availability of relevant resources, such as time and personnel. Alternatively, chunks may inadvertently be omitted. Even if the chunks are completed in “proper” sequence, the effects of decomposition can be significant, since familiar marks of progress in performing the activity or executing the role might be ambiguous.

Several examples illustrate the practice of chunking. In one case, a woman reported that the weekly hour-long meeting with her supervisor had been shortened to 30 minutes, with the omitted agenda items being addressed piecemeal at the coffee machine, during lunch, or while waiting for other meetings to begin. In another, a father explained that he had been unable to locate his daughter at a friend’s house since he was not the “relevant parent” for that relationship. Parental obligations for those relationships had been decomposed and assigned to each parent, which worked until he found himself thrust into an unfamiliar situation.

5.1.3. Reinterpreting Circumstances

Chunking is also related to the practice of reinterpreting roles, activities and contexts. Because chunking allows previously discrete activities to be dispersed across time and space, it also allows them to be combined in new and unfamiliar ways. The boundaries around cultural domains can be blurred so that what is going on is ambiguous: Is this work or is it family, or is it something entirely different? To return to the juggling or balancing metaphors, they assume entities that are consistently “family” or “work.” Yet we found people often reinterpret those entities so that it can be difficult to tell just what is being juggled or balanced. Family gatherings can, for example, suddenly become opportunities for technical assistance and backyard barbecues can become sites for intense job-related networking. Likewise, work can be performed in settings where kinship shapes the distribution of information, and it is difficult to tell if someone was informed of something because of their job or their kin ties.

Reinterpretation was ubiquitous during fieldwork. For example, the Smiths lived on the campus where David worked. Wife Janelle worked as a children’s speech pathologist and she herself was the mother of young children. Janelle and her young daughters were once doing some recreational shopping at the campus bookstore, ostensibly looking for books for Mardi, one of the children. However, when Janelle found material she could use in her work, the outing suddenly took on aspects of work-related research. An activity during a family outing was accordingly transformed into work.

5.1.4. Multitasking, Multicontexting

When activities and roles are decomposed into smaller chunks people are exposed to a greater variety of tasks in more compressed periods of time. Family members often spoke of “multitasking,” or the ability to perform several tasks simultaneously. Families typically, did not judge all family members equally agile at multitasking, and there were jibes and jokes about who could or could not do many things simultaneously. However, the concept of multitasking only partially captures the complexity and ambiguity of living in a world of chunks. Not only did people often juggle several tasks, but they also encountered different contexts within which those tasks have meaning. For example, someone might be sitting at a personal computer switching between the tasks of confirming by email a shopping list with a spouse and a misplaced order with a customer half way around the world, while working on a report soon to be submitted at the adjacent office. On the one hand, the person is performing multiple tasks; i.e. they are multitasking. They can even be deceived as to the ease of it all, since they have remained seated throughout. Yet there is a hidden work here of recognizing, even if only unconsciously, that these activities are embedded in very different contexts. The message to the spouse may consist of ungrammatical phrases rife with spelling errors, while the message to a customer in a different country may elicit attention not only to proper style, but cultural appropriateness, as well. The person is thus rapidly shifting frames of meaning and codes for appropriate interaction, a sort of social work that is far deeper than implied by multitasking.

The practices of multitasking and multicontexting are at the heart of the intersection of work and family. Much work was taken home where it was performed in the context of family, and demarcating the boundaries around permitted and prohibited “imports” was a recurring discussion in most families. Likewise, responsibilities to household and family members were often discharged in the workplace, raising complementary issues of what was acceptable and unacceptable. This intersection of work and family can occur even if the familiar briefcase is absent: People speak of thinking about or “working through” issues from either domain while in the other.

5.1.5. Planning and Improvisation

The families we studied varied in the relative emphasis on plans and improvisations, both of which reflect the need to move people from place to place at specific times. Planning involves talking about formal sequences of action that, if followed, will hopefully result in the desired movements. In a world of perfect planning there is no need for family members to be in contact except to comfort each other that everything is unfolding as it should or to address other issues not related to immediate logistics (e.g. Can we schedule dinner with Joe next week?). Planning often began in the families with face-to-face discussions, accompanied by formal record keeping via Palm Pilots, daily planners, charts, lists and Post-Its.

Improvisation, on the other hand, involves responding to each logistical demand as it arises. Families who use this practice typically depend heavily on being in contact via landline and mobile phones, and email. This, of course, necessitates an infrastructure of communication and transportation devices and minimal constraints on the personnel. People figure out who is going to do what in real time and they trust in the accessibility and availability of others to make it all work. Roy Scott, for example, stated that his family had consciously rejected planning and instead took life one day at a time. However, this was possible only because he and his wife had created an infrastructure to absorb improvisation: relatively predictable work hours and an accommodating nanny.

In reality, of course, families used a mix of planning and improvisational strategies under specific conditions, although some like the Scotts proclaimed themselves to be one “type” of family or the other. The Tran family insisted that they made no plans, although their daily routines and schedules, as well as the long-term goals for their children, involved detailed planning. Families that relied heavily on planning typically found that plans could not be followed due to changes in needed movements or the capacity of personnel to move others around. The practice of planning also assumes perfect information and an unbounded rationality that is impossible to exercise. Plans seldom unfolded exactly as anticipated and being in contact allowed adaptation to changing realities. Even if plans did unfold as desired, the family members we observed *feared* that something might go wrong so they maintained contact just to be safe. For their part, families that relied on improvisation did so using predictable building blocks. They implicitly knew who could do what when, and their days were far more predictable than improvisation connotes.

Planning and improvisation are related to “flexibility.” Indeed, “be flexible” was a mantra within many families, although it was inconsistently defined and used. Sometimes it was used to justify the purchase of infrastructure to support logistics and contact. The dream of a completely seamless communication system in which someone could instantaneously reach anyone else was ironically as powerful the desire to limit one’s accessibility to others. Flexibility also sometimes referred to a state of mind in which family members were not strongly attached to specific plans and were thus willing and able to anticipate changes and make contingent plans. Yet a third common usage of flexibility was as an admonition, typically to children, to accommodate to the demands of the logistical system. A premium was often placed on being in particular places at particular times for the convenience of the next driver, and the willingness to be graciously hauled around was encouraged. Ironically, this “flexibility” implied both the absence of spontaneity and conformity to the demands of others, typically adults.

5.1.6. Infrastructure Building

Families spent considerable time and effort constructing an infrastructure of devices, services, expectations and social relationships that allowed them to remain in contact. Families varied considerably in the characteristics of their daily communication. For one family, hourly emails or phone calls between parents defined acceptable contact, while in

another it was the daily phone call between 1 and 2 p.m. that sufficed: plans were reviewed, changes noted and negotiated, and preparations for the evening were made. The exigencies of contact also had profound implications for “accessibility.” The very proliferation of communications devices made contact so easy that many people devised strategies to restrict their own accessibility to others while simultaneously seeking to maximize their ability to reach people. Thus, maintaining contact was embedded in larger systems of channels and buffers that were generally created for the conflicting goals of being in contact while not being contacted.

Infrastructure building will be described fully in section 5.3, but here we note that some families continuously sought the latest device or service that would enhance their “connectedness” or otherwise mediate between workplace and home.

5.1.7. Simplifying Lives

Some families attempted to consciously “simplify” their lives by changing some of the fundamental, driving logistical demands. Some such decisions were quite focused and direct, as when a family “consolidated” its children in one school or avoided organized sports to reduce the need to transport children. Such simplifications in one part of everyday life were often accompanied by increasing complexity in others. Other simplifications were more global, such as if a family decided to change its standard of living to reduce the need for paid employment. One family, for example, proudly proclaimed that they carefully assessed each potential good, service or person that could enter the family or household. They consciously decided whether to allow it “in.” The husband noted that they never left anything curbside for their city’s fall and spring pickup days: Unwanted items were discarded, given to charity or taken to the dump throughout the year. Everything was accounted for and there was nothing superfluous awaiting disposition.

5.1.8. Mutual Consulting and Specialization

Finally, the work skills and knowledge of spouses were often complementary and they often served as professional consultants to each other. They offered not just perfunctory solace at the end of a hard day, but professional advice about how to handle sticky personnel issues or the best way to frame a presentation to a potential client. This practice brought work-related skills and knowledge into the home so the latter was a staging area for the workplace.

The relationships between spouse’s jobs and careers were complex and idiosyncratic. For example, the two attorneys in the Schwartz family practiced different types of law, yet they referred clients to each other, discussed the politics of partnership and staffing, and shared information about new electronic legal resources. Likewise, the Scott family contained two executives. Michelle was a CFO working in the non-profit sector and Roy was a CEO. Michelle worked with him at home while he was developing a

corporate spreadsheet and she helped him find the capital he needed to keep the company going. He, in turn, advised her on personnel management and negotiation skills. Finally, both the Smiths had jobs connected to education. They lived on the campus where David was employed, so that work was part of the fabric of family on an hourly basis. While Janelle worked off-campus as a speech pathologist, David was her technical consultant for managing her databases and she advised him on the personnel issues he handled and on how he should organize his tasks.

In other cases there are significant differences in skills sets. In one family, the husband was a fireman and the wife worked in marketing for a high technology company. Their work rhythms and the very meanings they ascribed to their jobs and careers were radically different, and sometimes what counted as legitimate work had to be explicated and debated. The household was not dominated by a single professional discourse and the spouses' work schedules were often complementary. Yet even here mutual consultation about personnel issues and proper written communication was common.

5.1.9. Consequences of the Practices and Narratives

These practices and narratives had consequences and implications for dual career middle class families.

5.1.9.1. Innovation and Borrowing

The most profound implication of these practices is that families are not simply passive victims of the inexorable intensification and intrusiveness of work. Instead, they can be dynamic innovators that creatively integrate artifacts, relationships and ideas drawn from the domains of work and family. Practices and narratives are not mutually exclusive and families cobble them together in assemblages that vary in consistency. One practice yields to another, as the partial nature of solutions is discovered or logistical demands change. Families also examine their counterparts and may import meanings, practices, roles, etc.

To acknowledge that families are culture creators is not to romanticize the challenges they face. As we shall see in the next section, the constraints on practices and narratives are real, and so creativity and innovation are exercised under conditions of strain and stress.

5.1.9.2. Children

The practices become part of the social landscape to which children must adjust and adapt. We were struck by the socialization of children into both the exigencies of parental work and the practices that allow the families to function. They were also aware

that these practices and narratives are both similar to and different from those of kin, classmates and friends. Whether it is patterns of speech, framing problems or issues, or recognizing legitimate claims on time and help, parental work was a subtle, pervasive backdrop to the children's lives.

An important corollary is that children seemed to become young social theorists, analyzing their situations and drawing conclusions about how the social world works today and how it might work in the future. They may be unable to offer complete and accurate accounts of their parents' jobs, but they have assimilated other lessons about work, such as autonomy and the ability to control the use of one's time.

5.1.9.3. Morality and Grand Issues

Finally, the practices and narratives suggest that family members encounter larger issues of morality and meaning in their everyday lives. Selection bias undoubtedly affects this conclusion; after all, the people who agreed to participate tended to be thoughtful and reflective. But the project design allowed us to incorporate the friends, co-workers and kin of the focal families, and we were repeatedly struck by the consideration people gave to seemingly trivial decisions about daily life. This is not to say that all decisions took on the significance of a moral dilemma, only that people often posited moral consequences of their actions. When asked why they did this or that, adults typically offered reasons and the latter usually had a moral dimension. To conclude that families are making these decisions without any thought or deliberations is clearly unwarranted.

5.2. Constraints

The practices and narratives discussed above were not simply created *de novo*, but they had evolved in response to specific constraints. The relationships between constraints, practices and narratives are complex and non-determinate, so that uncovering the constraints does not allow us to infer a family's innovative response.

5.2.1. The Constraints

5.2.1.1. Householding

The first constraint we cite is that of establishing and maintaining a household. Households are located in particular sites and so they affect commute times and distances, enrollment in particular schools, shopping and accessibility to friends and kin. For example, one family placed a child in a distant private school when the local public school proved to be unacceptable. One consequence was that friends made at school typically lived far from the focal family's house, thereby limiting opportunities for weekend play. Several times during fieldwork we encountered occasions when a household had been

configured to minimize someone's burden and then those benefits were suddenly erased when a job was lost or parents could no longer afford a private school.

The configuration of space within the home could dramatically affect the intersection of work and family. In the Smith family, space was severely constrained as four people struggled to live in a space designed for childless couples and single adults. While work activities could and did take place in the house, file cabinets and computers were placed in external offices. Thus, David did most of his computing work in his office (located on the first floor of his residence building, but outside of the home) and Janelle's Mac was at one of the two schools where she worked as a roving speech pathologist. Making sure the right type of work could be done in the right space required considerable anticipation and schedule management by both Smiths. For the Jackson family, one of the considerations in buying a new house, rather than continuing to rent one, was to have enough space to outfit a home office. In the rental house, the workstation both parents used for their employment was crowded into a corner of the family room, a public space where interruptions were frequent. In their new house, they used a more secluded bedroom for their office.

Even after the household was established, it could be the focus of considerable time and effort. Indeed, we began this project looking at work and family, and were surprised at the amount of time and effort that went into consumption. Products were investigated on the Internet and at stores, and days were devoted to shopping. Ironically, families often told us that such days were not ideal for fieldwork since "nothing happened" then. Of course, from our perspective the time spent on consumption was an important activity of the family. We concluded that the work of consumption was, for several family members, at least as consequential as their paid employment.

5.2.1.2. Family Structure and Background

The specific details of family structure constrained practices and narratives. Obvious constraints followed from the ages of children and the presence of elders who required care (or who could assist in child care or meal preparation). For example, one family brought the mother of a spouse into the household with the specific agreement that she would provide childcare for about two years, for which she would be compensated. Conflict developed and she left the house after a year and a half. In another family, the wife's elderly mother made a standing offer to prepare meals anytime her daughter and son-in-law were too busy to cook. They simply called her in the afternoon, drove by her house after work, and picked up a home cooked meal packaged to go.

Family structure constrained practices and narratives in less obvious ways. In one blended family, different members might have access to different resources in the future. Knowledge about these circumstances was not equally distributed. In other families, less affluent relatives were available to serve as nannies, thereby solving a childcare problem. For example, the Schwartz focal family was intimately connected to the Bauer family. The latter was comparable in class to the Schwartz clan, since the husband is an attorney and

his wife is an educator. However, her sister, also an educator, is the onetime nanny of the Schwartz girls. Sadly (from the perspectives of three professors!), educated but less affluent educators seemed to often pop up in the role of nanny.

The larger issue here is that families were not homogeneous, nor could they easily be placed in this or that category. Even to speak of a “middle class” family sometimes was chimerical, since it included lower and upper class relatives who were connected to the focal family through different services and obligations. Some families were internally differentiated by class and culture, and those characteristics constrained practices and narratives.

Family backgrounds clearly affected practices and narratives. Several people described themselves as “children of children” of the Great Depression or as people who had otherwise come from humble origins. The Carlsbergs were representative. They lived in a large two-story house, but they invested conservatively, preferring instead to save money by intensive comparison-shopping. Roy Scott, although one of the most affluent and educated people in the study, came from a humble family in the Central Valley of California in which he was an anomaly.

5.2.1.3. Daily Logistics

Families confronted critical logistical demands that sent ripples throughout the days of their members. These demands were not always the most important event during the day, only the one that, by virtue of its place in a larger web of demands, shaped how other demands are met. For example, the need to transport a child to a lesson at a particular time might be met only by bargaining between parents about who would handle another obligation several days later. The locations of destinations and their relationship to traffic patterns at specific times of day were significant. One family, for example, ultimately rearranged work schedules so the father departed for work around 5 a.m. to avoid heavy traffic. His wife delayed going to work until she had transported their two children to school by 8 a.m. She then hit the heavy traffic and remained at work until 6-8 p.m., while the father was able to pick the boys up after school and bring them home. The children were thus spared the tedium of before and after school care, but the arrangement exacerbated tensions between the spouses concerning their respective involvement with the children.

Issues such as reliable and flexible transportation and employer policies affected how families handled logistics, as did the communication infrastructure. Plans seldom worked out exactly as intended, and fears of retrieving a sick child from school or the fear of forgetting a child somewhere were ubiquitous. Logistics, too, involved considerable analysis and they raised important questions. First, there was the question of who was to be moved by whom; i.e. the issue of relevant personnel. Second, destinations and routes had to be elicited, often a non-trivial task. Third, when movements could and must be made was discussed. Fourth, the means of transportation, including sneakers, automobiles

and public transit had to be settled. Finally, the legitimacy of requests were explicated and debated. For example, what requests are reasonable to make under what conditions? Who is obligated to whom for what purposes? Where do specific requests fit in a grander scheme of exchange of favors?

5.2.1.4. Regional Characteristics

The fieldwork was conducted between 1998-2000 in the Silicon Valley region of northern California, and that imposes its own constraints on families. The region was (and is) marked by a high cost of living: The median house toward the end of fieldwork topped \$500,000. The unemployment rate was exceedingly low during this period and many people work several jobs. Many workers, especially those with families, have been forced out of the region and into lengthy commutes, all so the family can purchase a house. There was a palpable sense of transience as families sought out places they can better afford and attachment to local institutions such as schools and churches is low.

Local geography and the distribution of destinations pose distinct constraints. Silicon Valley is relatively compact when compared to places such as Los Angeles and people routinely change jobs without changing residences. While development along the San Francisco Peninsula is compressed into a narrow strip between hills and bay, the northern Santa Clara County heart of Silicon Valley is less geographically constrained. Development is more distributed and most find it difficult to use public transportation to get to work. Despite efforts by local governments, jobs remain concentrated in the northern part of the county, housing in the south. These features shape local commutes and people often tried to find schools and other services that minimized logistical problems. Likewise, timing becomes crucial, as when a five-minute delay in reaching the carpool on-ramp to the freeway translates into a 35-minute delay in getting to work.

These conditions affected practices and narratives. One family chose its house specifically to be a block from the freeway to work. Another lived in a cramped tract house that minimized commute times. They acknowledged that they could afford a much larger house elsewhere, but they sought to avoid the commute in order to have more time with their child.

It bears noting that colleagues in other areas have commented that the work and family related issues confronting people in Silicon Valley are strikingly similar to ones they see. There are, however, specific characteristics of Silicon Valley that do shape practices and narratives. First, due to the nature of its industries and employment, it is a place where people often gravitate to technological solutions to the problems of daily life. After all, many people make their living at providing such solutions. Second, it's a place of extensive cultural diversity, one where people of many different ancestries live and work. Although ethnic groups frequently cluster in particular towns or neighborhoods, it lacks the residential enclaves of some other metropolitan areas. Furthermore, the nature of high technology work is highly interactive and people generally work under conditions where they interact

with diverse others. Finally, the fieldwork was conducted during the end of an almost decade long economic boom in which optimism was seemingly unbounded. Few people feared losing jobs because they, usually realistically, believed finding a new one was easy. Fieldwork in mid-2001 would be undertaken in very different economic conditions.

5.2.1.5. Jobs, Careers, Work and Industries

The characteristics of industries and jobs constrain practices and narratives. Some high technology industries are very fast paced and long hours have been typical; 50 to 60 hour workweeks are common and begging off weekend duties can jeopardize a career. One woman in the project said she never felt comfortable declining work because she was a woman without a doctorate in a field populated by men with more education. Some companies allowed employees to work from home at least one or two days a week, while others insisted that their workers be on-site. Some jobs, such as those of our two attorneys, are heavily driven by the convenience of courts and clients; others are not. The previously mentioned fireman worked series of “24 hour on, 24 hour off” shifts, and obviously responded to emergencies only as they occurred. The context of his work was very bureaucratic and he had to follow formal procedures in order to depart work for any reason. His marketer-wife followed no such formalities, and she worked at her office and her house. She could informally adjust her hours, just as long as the work was completed. The Jackson family, with two high-tech employees, had different work patterns. The husband’s job involved cycles of slow activity as projects started up, followed by intense and lengthy activity as projects neared completion. Periodically, his wife was required to be on call 24 hours a day for a period of a week, during which, she was in contact with clients all over North America. Much of this work was done at home. During this period, sleeping patterns in the house were disrupted and all childcare at night fell on the husband. The most stressful times were when the intense work cycle for the husband and the 24-hour on call cycle for the wife coincided.

Project-based work followed distinctive patterns in which periods of frenetic activity and unpredictable hours alternated with relative tranquility. Business travel punctuated the jobs of some family members, but the details mattered. For example, the father/husband of one family made frequent two-day business trips within California, while another made a major 10-14 day international trip every quarter. These travel patterns affected families in different ways.

The importance of rapid product cycles, the advantages to first entry into many markets, and the intangible, almost mysterious nature of some work in high tech industries drove theatrical presentations of work. The global nature of some jobs required work across time zones and this drove the rhythm of daily life: calls to and from Europe in the early morning, communications with Asia at night.

Workplaces themselves reflected differences in their responsiveness to family concerns. Michelle Scott’s non-profit employer, for example, was a highly flexible

organization with several “workspaces” in the Bay Area. It had a “distributed” workforce in which people worked at home, at one of the workspaces, or with different clients and research sites scattered worldwide. This flexible boundary between work and home was embodied in the women’s bathroom where a breast pump was added to the amenities.

5.2.1.6. Episodic Challenges

Episodic challenges affected everyday lives, especially daily logistics, and the need and ability to be in contact. Routine illnesses or injuries were perhaps the most significant impediment to smooth logistics. Stories abounded about the impact of a sick child on daily logistics and the dreaded call from the school. Even anticipation of such a call because a child was not feeling well in the morning caused the parents to alter plans so someone was available “just in case.” The families we studied also frequently assumed responsibility for responding to a variety of requests by their own parents, such as helping out during illness or injury, performing household repairs, or providing entertainment during periods of depression or boredom.

Episodic challenges also included rites of passage, such as baptisms, marriages, or first days of school. Other events or occurrences included the arrival of temporary houseguests or offering substantial help to friends during personal crises.

5.2.1.7. Crises

Finally, crises posed significant challenges to control. Job losses or transfers to other regions threatened lifestyles, as do some changes in career paths. Deaths and acute or chronic illnesses often caused modifications to logistics. The fear of divorce, too, altered the family, as did marriages that combined previously autonomous families with their own logistical patterns into larger and even more complex systems.

5.2.2. Consequences

The constraints we have presented have consequences for dual career middle class families. They obviously establish the specific constraints on practices and narratives in individual families, but they also have broader implications that we discuss below.

5.2.2.1. The Crowded Life

Claims that life has “speeded up” are common among ordinary people and the popular media. In fact, these claims have seemingly assumed the status of fact. To be sure, it is now possible to complete an array of activities, such as shopping on line and paying bills over the Internet, in less time than a decade ago. But the result we saw in the

lives of the families is less that life speeds up than that it becomes possible to take on more and more responsibilities. Whether it is being “empowered” as a consumer to make more decisions about long distance carriers or as a worker to prepare reports without secretarial help, the people we observed were busy performing activities not contemplated even a decade before. Ironically, even nominally labor saving services could make demands on time. Mr. Carlsberg, for example, commented that with every purchase came a probability that he would be on a customer service or technical assistance line within a few months. Speed and efficiency might be the popular rhetoric, but crowding and making do all too often describe the reality.

5.2.2.2. The Managed Life

The “crowding” of more activities into everyday life challenged the capacity of most families to get everything done, and so family members sought ways to better manage their burdens. Work provided a convenient reservoir of devices, techniques and ideas, so that it was both a source of problems for families and of the tools to solve or address them. This dynamic is one reason why management tools were so easily imported into the family—much of the family challenge is a management challenge. Mr. Flaherty articulated this most explicitly when he said he wanted to participate in the project because, “I don’t live life: I manage it.”

This report has already described some imports from the workplace to the home, such as Mrs. Mendoza-Jones’ creation of a family mission statement. Her husband used the protocol he had learned to organize fire-fighting efforts to coordinate his home remodeling projects. In another family, a Gantt Chart was used to coordinate preparation of the Thanksgiving dinner. Other imports from work can be difficult to explicate, as when family members use such techniques as conflict resolution to defuse arguments. Still others can be quite explicit, as when the technical assistant from Mr. Flaherty’s office selected and set up the Palm Pilot he used to keep track of work and family obligations.

We were struck that family members generally spoke of the family as separate from these management techniques, philosophies and devices, despite their prominence in family settings. They were at the most conceptualized as facilitating family activities, but talking about them and using them were not usually deemed family activities.

5.2.2.3. Constructing the Internal and External Forces

The notion of constraints contains a pitfall in that it implies that there are external, objective conditions that drive families to respond. Sometimes this is the case, as when families compete for housing in a tight market and need certain incomes to accumulate down payments or qualify for loans. Job requirements, too, can impose constraints in the form of work hours or business trips. But in many instances the constraints may be spoken of as external (“They are making me do this”), when they seem to be self-imposed. The

Carlsberg family and their relationship with their boys' private school is illustrative. Both parents volunteered extensively and they seemed to interpret this work ambivalently. They were glad to be involved in their sons' classrooms, but they frequently complained about the arrogance and incompetence of the school officials who coordinated activities. When asked why they volunteered so much, they always replied that to do so was demanded by "them," although the identities of the latter were never clear. Likewise, the consequences if the Carlsbergs declined offers to volunteer so much were vague. The nature of the school's claim on their time ultimately became a joke between the fieldworker and the parents, and when fieldwork ended they decided to only volunteer the required minimum of hours. In this case, the external "they" was to a large extent self-imposed.

Most cases are not as vivid and dramatic as the volunteering Carlsbergs, but it bears noting that every external constraint reflects decisions someone is making about housing, jobs, recreation, standard of living, education, etc. There is then an internal side to external constraints, and how family members construct the causal relations to which they then respond is a central family practice and the subject of many family narratives.

5.2.2.4. Looking for Guideposts

Finally, the crowding of life and the incorporation of management strategies into families, along with ambiguities in the loci of causal factors, resulted in families that frequently found themselves operating without guideposts as to how to act. The chunking and multicontexting that have transformed the very nature of the situations in which families find themselves exacerbates this condition. The families we studied thus engaged in significant sense making about situations, they created reinterpretations of work and family, and they borrowed practices and narratives from other families and workplaces. They talked and reflected about what they were doing and what they should be doing. This conclusion should not be construed to mean that they were completely adrift, only that familiar guideposts often seemed irrelevant and ones that fit new situations were often difficult to find. Although members of some, if not most, families occasionally joked about their desire for therapy, the quest for sense making and practical advice was actually more pervasive.

5.3. Infrastructure

Family members developed and used a material infrastructure that supported and reflected specific practices and narratives. Elements of this infrastructure could be physically located in the home, automobile, workplace, public places and on the person. Like other infrastructures, elements of this one are both visible and invisible to participants. For example, family members were much more likely to talk about their use of personal digital assistants (or PDAs, such as the Palm Pilot), pagers and cellular phones than conventional wire phones, even if they used the latter extensively. Likewise, they seldom discussed their automobiles: phones and cars are such obvious and taken for granted

devices that using them becomes unconscious. Some elements of infrastructure are consciously created, as when a family member purchases a device and uses specific functions, and other elements are the result of colonization of other systems, such as workplace email and voicemail systems, or the knowledge that a friend's cellular phone will keep everyone "in touch."

5.3.1. Household

The families consumed products and services that allowed them to create themselves as a family. Shopping *per se* was both a common activity and a metaphor for other activities, such as finding a church or lifestyle. In some families, the household was minimally equipped with furniture and other items, and all purchases were carefully considered. Humberto and Suzanne Mendoza-Jones exemplified this approach. They seldom bought items as "experiments" to see if they liked them and clutter was missing from their house. Furthermore, they explicitly decided to live well below their means in order to achieve financial security and an early retirement. They also articulated the view that a heavily provisioned house required more maintenance that took time away from activities with their young girls and restricted their own freedom on days off.

The Carlsbergs represented a striking contrast in purchasing patterns. The house was a large two-story edifice with a separate recreational-garden room and its rooms were filled with possessions. A long set of upstairs closets was used as a commissary for items to be distributed as gifts throughout the year. The family gave extensively, and because of their heavy work schedules and long commutes the Carlsbergs kept the commissary stocked with things bought at outlet malls or during one department store's annual sale. The kitchen was always cluttered and a running joke by Ann Carlsberg was that it would be clean once before the end of fieldwork. Services were assessed according to cost, but not necessarily use. For example, the family had no cellular phones because they had systematically analyzed costs and benefits, and they concluded the former outweighed the latter. Still, Alex once signed up for a free trial of a new telephone service without telling his wife and the result was catastrophic: She called home, could not get through in an emergency, and drove twenty miles from her office to find out what had happened. Likewise, a new computer arrived by UPS one day, catching the entire family (except Alex) by surprise. This brought the family total to eight, which he justified since any computer or software was an investment in job security or the boys' education

A recurring issue for most families concerned the allocation of household space for work. We have seen that such space was limited in some smaller dwellings, such as the Smith's. The Carlsberg's had considerable space and computers in several rooms, but the most used "office" was a card table placed between the kitchen and family room. It was here that Alex completed the tax returns for he and his wife, his parents and mother-in-law, and where his wife worked on various projects for school or from work. The Mendoza-Jones family had dedicated a small bedroom as an office, and Humberto tried (unsuccessfully) to furnish it with the same desks and bookcases that he had seen recently

installed in the fire department headquarters. The space was to be used by him to complete work related reports and by his job-sharing wife to keep up with marketing projects on the days she was at home. The Flaherty's had an office near the kitchen that was equipped with a computer that was occasionally maintained by the technical assistant from Jerry Flaherty's office. Both parents used the computer, as did the two children who preferred it because it was the best one in the house (there were two others) and because the office was located so that anyone using it could monitor the action in the house. Of course, this also limited its use to specific activities during times of heavy traffic. Finally, the Allen-Rodriguez family's office was tidy and well furnished. Its computer was used more for playing games than work, and it was a gathering place for Bill Allen and the boys, or for the latter and their cousins.

Work sites were thus centered on, but not limited to, home offices and the latter were usually defined by the presence of a computer. From one perspective, the challenge was to define a space in which serious work could be done, but from another it was to colonize that space for other activities. Offices were frequently gathering places that framed activities somewhat differently than did other rooms. They contained computers that ran games (not just work applications), facilitated emailing, and supported schoolwork. Work-related activities, such as reading reports, were thus sometimes driven from the office (where a child might be searching the Internet for information about the Boxer Rebellion) to a comfortable chair in front of the television.

Another issue occurred when families moved to new locations. Because the Tentori family did not have enough space and could not afford housing in the Silicon Valley, where both parents worked, they sold their condo and moved to a farm town about 75 miles away. This involved a major reworking of their everyday lives. Their young son had to adjust to an unfamiliar school setting. Husband and wife now had long, separate commutes to their Silicon Valley jobs. The family had to adjust to a new environment in which outsiders were not always welcome and even finding a church in which they felt comfortable was challenging.

5.3.2 Workplace

Workplaces were often used to support people in meeting their family obligations. Use of workplace communication systems was prominent and ubiquitous, and will be discussed in section 5.3.3. Workplaces were configured in various ways to accommodate to family obligations, the aforementioned office breast pump being only a vivid example.

Workplaces often accommodated children who could not be left unsupervised during some work hours. For example, Sophia Allen-Rodriguez picked up a son after middle school at 2:30 p.m. and tried to deliver him to a supervised after school place program, but the latter followed its own schedule of starts and stops. Sometimes she had to bring him back to her workplace where he sat in the conference room and worked on homework until her departure at 4 p.m. Her immediate work area was thus not configured

to accommodate the boy, but the acquiescence of her co-workers to his use of a shared space was essential. Sophia worked in a public agency and several of her colleagues (and her immediate supervisor) were women confronting similar childcare dilemmas. Senior management, too, was sympathetic and so the arrangement went smoothly. Another woman's employer supported a listserv for employees who wished to discuss parenting concerns.

Sometimes workspaces took on the characteristics of homes. Alex Carlsberg's was equipped with an espresso machine, refrigerator, sound system and CD collection. Firehouses were, of course, like homes since fire fighters lived there 24 hours at a time. Some people had set up tables on which to pursue individual hobbies, such as stained glass, and each station housed sets of fitness equipment. The long periods of idleness were often punctuated by conversations about family issues, such as how spouses and children managed during a fire fighter's shift. Likewise, responses to fires and medical emergencies were interspersed with stops at grocery stores, video rental shops, and stores stocking items to be used during the next day's home remodeling projects.

Workplaces also served as reservoirs of items that moved, either permanently or temporarily, into households. Technology, including computers and software, flowed freely, and once home it was often used by other family members. One father/husband occasionally collected leftover food from corporate meetings and workshops, and brought it home where it was repackaged for children's lunches.

To be sure, some people did not colonize the workplace for family purposes. There were no personalizing touches, such as family portraits sitting on desks, and the person simply came to work and then departed. But in general, workplaces were used and configured to selectively integrate family obligations into work.

5.3.3. Technology

Since managing logistics and being in touch was so important to the families, it is not surprising that they create de facto information systems connecting the sites of their everyday lives. These systems incorporate elements provided by employers with those purchased by family members, and they can include both immobile and mobile devices.

Members of some families used cellular phones and pagers to keep in touch. In some cases these were purchased from family monies, but in others the employer provided devices so they themselves could "be in touch" with the employee. Employer-provided phones were sometimes adapted for family purposes. Humberto Mendoza, the firefighter, sometimes used the cellular phone provided by his wife's employer. She never used it until the family's preschool operator required cellular phone numbers from all parents. Suzanne provided the number to her phone and then routinely left it at home. She explained that she was always near a wired phone and after all, she had interviewed dozens of preschool operators and finally chosen the one she trusted. She neither felt inclined to closely monitor

the preschool via an online system that was being proposed, nor did she feel that she needed to be instantaneously accessible.

Some family members, like Rajiv Mohan, carried multiple cellular phones that had different calling capabilities and that were billed to different accounts. Symbolic proximity to the family was indicated by which number other people were given, and the fieldworker was reminded that he had a number that very few people were allowed to use. Other people, like Alex Carlsberg, avoided costly cell phones and used the phone in his office, where sometimes 50% of his calls were unrelated to his job. His wife frequently called to confirm daily plans, but she hung up as soon as he answered or just let the phone ring once as a signal to him. Her employer billed her for all calls from work and so her husband would immediately call her back to minimize the family's phone bill.

Most of these *de facto* communication systems provide redundant messages. Family members often emailed, paged and called (on one of several phones) in order to be sure the message got through. The need for redundancy reflected both the flakiness of some devices (e.g. dead batteries) and the unpredictability of others' schedules.

The ease of access simultaneously created a need to limit it. Sometimes the pager served as the emergency means of contact. Jerry Flaherty, for example, wore a pager and only a handful of people knew the number. In meetings he would turn off his cellular phone, but leave the pager on. If he was paged he guaranteed that he would call back within ten minutes, regardless of circumstances. People were thus warned to think carefully before making a page. Other people developed codes that identified callers, thus too marking their relationship to the person or family.

Technological devices other than pagers and cell phones were also used. Personal digital assistants, like the Palm Pilot, were used by some people to manage their calendars and to integrate them with those of other family members. Indeed, decisions about what information to so integrate and what to keep separate reflected idiosyncratic models of the relationship of work and family. One person might never enter a reminder about a family event into a Palm Pilot that is used primarily for work, while another would think nothing of it. Jerry Flaherty, for example, routinely handed his PDA to his secretary who printed out his schedule so she could better schedule meetings. Of course, she simultaneously became informed about some of his family's activities. Neither party thought this unusual since her status had become that of a close family friend.

One caveat regarding the technological infrastructure is warranted. Family members were often most articulate about their devices and services, but the systems they create are simultaneously technological and social. Consider Debbie Carson's use of both the technological and social resources available to her. She drove home from work in her SUV to pick up son Ethan from school in order to take him to his regular voice lesson. However, she was uncertain if there was a lesson that day. Debbie instructed Ethan to use her cell phone to call his brother Derek and ask him to check the voice mail on the landline telephone for a message about the lesson. Once he knew he could then call her back with

the information. This transaction was completed before she arrived at the critical intersection where she had to decide whether to go to the lesson or go home. Even though Derek did not live with Debbie, she knew he would be there burning a CD. He was using his step-father's equipment to make copies of a South American madrigal tape for a co-worker "friend" of his biological father, thereby explicitly demonstrating to his father that he is both a "techie" and an "entrepreneur."

Different family members typically interacted differentially with the de facto communication system. The issues that drove use varied, including cost of services, comfort with technology, and perceived need. Some people, for example, with very regular routines or who worked in close proximity to a landline telephone simply did not see the need for a cellular phone. Regardless of ultimate decisions, the creation and use of these communications systems were often contentious and subject to experimentation.

5.3.4. Consequences and Implications

There are several consequences of the material infrastructure for dual career families.

5.3.4.1. Configuration of Space

We were struck by how spaces nominally dedicated to one cultural domain were so often reconfigured to support another. Tracing the material connections between domains reveals and reflects the extent to which family and home are brought into the workplace. This alone is significant, since so much discussion has been about the penetration of home by work. The material infrastructure connects work and family, and thus provides the platform by which the two are further integrated. Places of work in the home and the use of technological systems to remain in touch were both sites to observe practices and important components in family dramas. The latter concerned how activities are valued and the conditions under which people are part of (or apart from) work or family.

5.3.4.2. Decisions About Systems

The people we observed did not make decisions about all elements of their information systems because some were decided by circumstances beyond their control, such as employer policies. Decisions were often shaped by gaps in the de facto information system so what they bought can be easily integrated. The most obvious example is purchasing a home computer that is consistent with the workplace one.

An implication is that although different devices and services are obtained at different times and may be owned or controlled by different individuals and organizations, it can appear quite seamless from the perspective of the family member. The extent of technological integration was especially striking to the team.

5.3.4.3. Consumption and Production

Finally, the material infrastructure was the object of considerable expenditure and research. People either learned about it or they recruited knowledgeable friends, co-workers or even subordinates to assist. Simply establishing the infrastructure and maintaining it could be a major family activity, and some members even specialized to provide technical assistance. Yet this infrastructure was largely invisible to family members. Creating, maintaining and trouble shooting was typically conceptualized as an instrumental activity that supported other “family” activities. However, these infrastructure-related activities can be analyzed as constitutive family activities. Infrastructure decisions were expressive of family decisions about practices and even a family’s identity. These decisions also frequently thrust the family into relationships with other people who help out when the limits of family members’ technical expertise are reached.

5.4. Relationships

The families were also embedded in larger networks of social relationships that supported practices and narratives. Sometimes these larger connections are created when families purchase services that tied them to strangers. At other times the ties were with friends and co-workers, and their networks of acquaintances. Ties of reciprocity were especially salient here. Connections to institutions such as churches, schools, camps, workplaces etc. were often important. Finally, the use of family ties was ubiquitous. People either used their extended families or they used family as a template through which to incorporate people into their network of helpers.

5.4.1. Purchasing Services

Families made numerous decisions about which activities they would perform and which they would export or “outsource” to various providers. Eating meals at restaurants or “cooking” by picking up a roasted chicken at the supermarket deli on the way home are familiar examples. Hiring gardeners, housekeepers, mechanics, and nannies are nothing new, but somewhat more exotic services are increasingly used. Internet grocery delivery, taxi services that specialize in the timely delivery of children at activities, and even personal assistants who purchase gifts and entertain visiting relatives indicate the range of activities that can be outsourced.

Historically, American families have purchased services back to colonial times and so we must be cautious in suggesting that current patterns represent a significant innovation. Yet outsourcing is not quite synonymous with buying. The very use of the term illustrates the penetration of family by corporate rhetoric and it also implies that the family is in some way a productive unit. Outsourcing appeared to reflect the broader impact of consumption activities within the household, since people frequently explained that they lacked the time or expertise to perform additional activities. Also striking is the outsourcing of services that

are central to the identity of the family and that traditionally convey intimacy. For example, after extensive research Humberto and Suzanne Mendoza-Jones selected a preschool for their girls that emphasized “civility and manners.” They explained that these were among their central values, but they also felt that they personally might be too inconsistent to inculcate them. Here parents are not simply outsourcing a service, but in doing so they are potentially transforming the family by producing children who will import valued qualities.

Precisely what will and will not be outsourced reflects fundamental family identity by allocating activities in and outside it. For example, the Schwartz family gardened on Sunday: making post-winter repairs, clearing away debris and planting spring flowers. They conceptualized gardening as a family activity, one that defined who they were. However, they considered shrubs, more problematical to plant since they require deeper holes and trickier handling. Thus, they were left for the gardeners to plant, and so only some aspects of gardening were outsourced.

5.4.2. Social Ties and Exchange

Other services were not purchased, but rather they were exchanged through informal networks of helpers. These exchanges were often so casual as to be hidden to the exchange partners. For example, in Michelle’s workplace, the professional women acted as informal personal assistants for each other. Michelle reminded Kelly about her husband’s medical appointments and in turn, Kelly reminded Michelle of events connected to her children. One of Eleanor Flaherty’s significant challenges was to arrange transportation for her middle school daughter to a summer camp. She and two other mothers met in a driveway to plan how they would transport their girls to and from the camp each week. The bargaining was complex, but when completed a web of reciprocal exchanges connected the mothers and girls. In another context, Jerry Flaherty explained that the family was a gracious host of parties and one outcome was other people were willing to help them in times of need.

Such networks of exchange were ubiquitous and without them families were sometimes left without the resources needed get through a day. Without someone available to step in at the last minute to provide childcare for a few hours the alternative was to use sick leave or vacation time to solve the problem. The Carlsberg family, for example, lacked the Flaherty’s broad network and one of the parents usually had to use a vacation day to supervise a child who was out of school for the day.

5.4.3. Institutions

Families also were connected to various institutions that were used for work or family purposes, or that otherwise connected the domains. Sophia Allen-Rodriguez, for example, was knowledgeable about local youth recreation programs that could be used to provide supervised childcare during specific hours. Without these institutional supports her

boys would have had to stay in her office or with her mother after school, options they found boring. Michael Flaherty, Jerry's son, volunteered after school at a local agency that provided technical training for novice computer users. He rode the train to the agency, performed his duties, and then was picked up by his father after work.

Institutions often became the generator of relationships between children and parents. Indeed, such institutions played an especially valuable function by offering stability in a region where people work long hours and move frequently. Linda Schwartz, for example, was an elected executive of a Jewish community organization. She had a number of relationships connected to that organization, including with clients and other professionals. Many of these people later appeared at her daughter's Bath Mitzvah and one of the family's nannies came from the school associated with the organization.

Children's athletic teams, churches and educational institutions regularly serve this function. Indeed, some develop reputations as the preferred leagues, churches or schools of particular categories of people, such as Hewlett Packard middle managers or Taiwanese immigrants.

5.4.4. Extensions of Family

Finally, the focal families were parts of larger kinship networks that, for better or worse, exchanged particular services. Alex Carlsberg, for example, managed the finances of both his parents and mother-in-law. The latter often prepared meals and occasionally provided childcare for the Carlsberg boys, who lamented the absence of VCR, computer or cable TV in her house. Humberto and Suzanne Mendoza-Jones advised her professor brother about practical money management, and Sophia Allen-Rodriguez described a middle age sister as her current "project." The woman had been addicted to drugs and was lacking the many expected accoutrements of American adulthood, such as a driver's license, credit rating, or job. Simultaneously, Sophia and her husband interacted daily with another sister, her husband and daughters. They often slept interchangeably at each other's houses and evening and arranging weekend childcare was never a problem.

Ironically then, extended family ties were common in a place celebrated as the land of the new, the virtual and the transient. Such ties were often created where they otherwise did not exist, and the realm of fictive kin was diverse and important. The Carlsbergs, for example, provided services such as legal and financial advice, and home repairs for an elderly friend of Alex Carlsberg's parents. She had effectively been assimilated into a sort of pseudo-family status. Nannies provided similar occasions for family creation. The Scott family and the family of their nanny were closely intertwined. The nanny's son attended the prosperous peninsula school that was in the Scott's neighborhood, even though his family lived in another town. This was done partially for convenience, but it also gave him access to resources he otherwise might not have had. The pastor and his wife of the church to which the Jackson family belonged were incorporated as symbolic grandparents of the Jackson's young daughter. This involved visits to the pastor's home at least once a month and attendance by the pastor and his wife at the birthdays of the daughter.

5.4.5. Consequences

5.4.5.1. Keeping Track of Relationships and Maintaining the Network

Maintaining and using social networks exists within a larger context of understandings about other people's daily lives, including the resources they have available at specific times and places. For example, does someone typically have their cell phone with them on Thursday mornings or are they "out of touch"? What do they believe are the acceptable and unacceptable reasons for asking for help? What resources, such as time, transportation and expertise can they muster? The families we followed kept track of many relationships and their characteristics, although we also saw families specialize by assigning responsibility for specific relationships to different personnel. Networks, too, had to be "exercised" in order to insure that relationships were still active. Collectively, these activities far exceeded familiar notions of "networking."

Access to businesses, groups and institutions necessitated knowledge about what they offered and how to leverage their offerings. Conversations that initially sounded like small talk often conveyed information about programs and services that might be useful in the future.

The reliance on relationships that connected the focal family to other people and organizations thus rested upon a constantly shifting body of knowledge about individual lives and community resources. It also drove a willingness to offer assistance in the hope that it would eventually be reciprocated.

5.4.5.2. Instrumentality

Many interactions we saw were molded by a seemingly benign instrumentality. Sometimes this was blatant, as when someone did something solely for the purpose of demanding a favor later. More often, instrumentality was simply a pervasive accompaniment to social interaction. Families were generally searching for contacts or connections that might be useful in meeting family or work obligations. Indeed, several people joked that they were always "on the make" for new connections. Many occasions provided such opportunities and because it was difficult to predict when a valuable connection would emerge instrumentalism was ubiquitous. Instrumentalism was also driven by the hectic schedules and chunking of activities we witnessed. Many people thus tried to accomplish several goals with one activity, while simultaneously building a web of reciprocal ties that could be operationalized in the future.

5.4.5.3. Limits of Control

The adaptive functions of the broader social relationships described in this section also can limit the family in important ways. Relationships were often entered into for one reason, only to be transformed into something else. Furthermore, consensus about them

did not always exist. The solution to the Flaherty's childcare dilemma is illustrative. From the perspective of the parents, they had purchased care from a provider; the relationship was simply a business one. But the relationship had continued for fifteen years and the child care provider and her husband had become connected to the Flahertys. Their children referred to them as "pseudo-grandparents," they visited them at holidays, and their very conservative values had, by the parents' admission, entered into the "Flaherty family values." What had started as business transaction had indeed become something quite different, and in the process the core values of the family were altered. In a similar case, a nanny introduced her charges to her religion, while their parents remained largely oblivious to what was transpiring.

5.5. Identities

The families and workplaces we observed were also deeply implicated in identity formation, both of the individuals within them and of the family as an entity. Most striking to the team were messages that persons and families are themselves objects that can and should be "worked on." Accordingly, practices and narratives often supported this perceived need to be able examine self and family and remake them in light of new needs.

5.5.1. Creating the Person: Worker and Family

Personal identity is substantially situated in work and family, and much that occurred in those domains was about making individuals into workers, family members, and more broadly, people. Ideas about identities were communicated to others, often through theatrical performances that demonstrate a person's attributes and their usefulness to other people. Much of the work practice we observed was explicitly intended for viewing by superiors, peers, subordinates and clients. Piles of work were moved around, telephone calls were sometimes staged for both the receiver and an audience, and meetings were arenas in which to demonstrate one's value. The workplace sometimes seemed to be as much about exchanging or withholding information about each other as it was about performing tasks.

The person was not taken for granted as an entity, but rather was the object of considerable work. The person could be "reinvented" when existing attributes are rearranged or presented in novel ways. We have already described workplaces as sites with resources, such as devices and techniques, that could be drawn into practices and narratives. Corporate reorganizations, mergers and decisions to outsource functions provided a ready template for a social world comprised of impermanent assemblages of elements. Workplace training in interpersonal skills and management techniques could serve as resources for working one's self or family members. Humberto Mendoza, for example, adapted a Los Angeles County fire fighting approach to how he presented himself in job interviews. He conveyed the approach and his innovative application of it when he mentored junior colleagues.

Families were not isolated from job-related identity work. Humberto, for example, explicitly approached home remodeling projects and housecleaning chores as he did fires, working on himself and mentoring others. Jerry Flaherty, the man who spoke of managing his life, also saw the major challenge facing his teenage son as one of “time management” and he incorporated lessons from work into his interactions with the boy. His wife told of advising her daughter to avoid, but not confront, a girl at school who she disliked. She explained to the girl that at work no one could afford to make any unnecessary enemies since you never know who can help or hurt you in the future.

Children learned to recognize and respond to the different realities of parents, friends, nannies and teachers. The family was a site where adults and children discussed and rehearsed the various persona that were projected into work relationships, just as family roles were discussed and rehearsed at work. Collectively, these practices were adopted to prepare people for lives in which they recognize and adapt to changing circumstances.

Families tried also to establish control through longer-term efforts to shape the context within which family members’ everyday lives were and would be lived. These efforts to control context can be usefully distinguished from the plans and improvisations of everyday life. They were often directed toward a more distant future. They were not about how to improve logistics and communication today or tomorrow, but about how to change the very lives in which particular patterns of logistics and communication make sense. They were often built in reaction to what family members found frustrating about their own everyday situations and from positive assessments of what they thought worked for other individuals and families. They were thus less an ideal to aspire to than the negation of that that was currently annoying. Furthermore, they were often indirectly expressed so that issues of control and power were tacit. Family members could be talking about topics seemingly far removed from everyday life but also interjecting claims about controlling the context. For example, discussions with a child about choosing high school courses might be framed in terms of potential jobs and the supposed capabilities of people who hold those jobs to control logistical demands. Finally, discussions of these issues were often wrapped up with the “big issues” of defining the family. For example, much of child rearing seemed to be focused on inculcating skills and knowledge that would hopefully provide children with control over their own everyday lives.

A particular challenge of identities was faced by immigrant or refugee families, such as the Le and Tran families, both of Vietnamese descent. Both families put their children into school, church, or day care settings in which the Vietnamese language was used or taught. Both families sought a “best of two cultural worlds” identity for their children: grounded in Vietnamese values and traditions, while comfortable with and well adapted to mainstream American educational institutions and work organizations. To insure that the Tran children were well rounded, all of them were put into music and martial arts classes. The Le family expected to do the same when their children were older.

The use of education to control context was prominent in most families. Ethan Rodgers, for example, deliberately pursued singing and acting as major avocations, even though he intended to be an engineer. He explained that the performing arts will help him become more social, adding value to his net worth and making himself a potential manager. Managers, he said, are “techies” with social skills.

Education was closely connected to knowledge acquisition and skill building in the form of classes, self-study and tutoring. It was also presented as an investment in self-presentation that is important in an information driven economy, one in which it can be difficult to measure individual contributions to outcomes. Degrees, work histories, and skill sets figured in narratives and children were made aware that educational choices made in childhood play out in the logistical constraints of adulthood. A running joke in the Schwartz family illustrates how even trivial activities of everyday life can become imbued with larger meanings about education and the future. For them, the phrase, “Do you want fries with that?” was a class-based assessment of people and positions. If a university education was not required or apparent, the job or person was suspect. Thus, the joke was a gentle but constant reminder of a great social divide that played out in educational effort today.

5.5.2. Creating the Family

In this final section we discuss how the families we observed created identities for themselves. We develop the idea that these families were only to some extent social units with given attributes that identified them, than they were fundamentally engaged in creating or producing themselves as specific families. Such production of a family further blurs and complicates the boundary around it. Family members were individuals who accounted for their own actions, and which actions “counted” as family varied within and between families. For example, we have described how for the Schwartz family gardening was a “family activity,” one that contributed to its identity as a specific kind of family. For the Allen-Rodriguez family, gardening was a chore to be perfunctorily completed so its members could get on with “family activities,” such as hanging out with the extended family, visiting their vacation home or going to a local theme park. For the Tran family, all members were expected to participate together in activities that defined them as family: these included church based activities, camping, and visits to other Vietnamese families of friends and relatives.

5.5.2.1. Managing Membership

People flowed into and out of the families, and who was in or out of the family could change over time. Even who was considered in the family sometimes differed from different perspectives. This was especially true in situations where fictive kinship was operative: One person might deem someone in the family, while others might disagree. Families discussed who the members were and what rights and obligations they had.

Because of these fluctuations and uncertainties membership in the family was not simply given but it was constructed and renewed through practices and narratives.

Several examples will illustrate the work of managing membership. High school senior Ethan, a child in one focal family, “adopted” the family of his best friend, also named Ethan. The members of this family were around after school when he did not want to be alone and so he spent time there. He said he enjoyed their “version of family.” Accordingly, Ethan’s attachment to families was complex and somewhat ambivalent, and he was in and out of two families for different reasons.

The families of a nanny were frequently adopted as satellite families, but not every nanny is so absorbed. In the Schwartz family the girls’ first nanny was clearly incorporated into the extended clan. Ginger, another Schwartz nanny, became unhappy and distracted, and was not so included. Not only was she “not family,” but eventually she was dismissed.

The Flahertys, who had employed a woman to provide childcare in her home for their two children, provide another example. The woman had previously provided such care for several other children who were teenagers during the study. They and their families remained in touch with the woman, and they had even been assimilated into the Flaherty’s network of extended kin.

A final example of managing membership is seen when family relatives are removed from households. In one family, a mother-in-law was asked to leave; this required the husband and his wife to seek child care outside of their house. In another family, a father’s younger brother was forced to leave the house when his grades plummeted in his final semester of high school and he stayed out late at night. The same family incorporated friends as part of a fictive kin network. These people helped one another when they were in need, lending thousands of dollars when one or another person encountered crises. The lending of money was the test of inclusion in this network.

5.5.2.2. Constructing Family

The families constructed themselves in two different ways. In the first, people “in” a family participated in some activities and had some responsibilities that supported their family even if they are not acknowledged as such. This report has provided several examples of work that is apparently associated with running a household and thereby supporting the family members, but which is not really considered by them as “family.” Other activities observed were identified as “family activities” under some conditions. Eating, for example, could be transformed from a solitary process of ingesting nutrients into an affirmation of family identity when several people gathered and a meal prepared. Thus, gazing from the perspective of an individual family, some of his or her daily activities would be interpreted as being in or counting as family, while others did not. Of course, the fieldworkers and other family members might have different definitions of what was and

was not part of family. Thus, everyday life was lived in a complex mosaic of assumptions and expectations about family and its articulation with other domains of life.

Second, families constructed themselves as such by identifying some practices as “family activities.” Particular holidays were often designated as “family days” where family traditions are created. In the Scott family, Mother’s Day began with a special breakfast and a trip to the zoo and Father’s Day was to be spent camping. Ironically, the desire to create family traditions or other markers distinguishing the family compelled people to look for ideas from other families. Borrowing was frequent, as people talked about their families at work and during social occasions. This neither suggests that they lacked continuity and would thoughtlessly adopt any new practices, nor does it imply that people were borrowers unable to think for themselves. But the families did encounter a seemingly constant stream of ideas about family practices and narratives. Some were greeted with outrage or indifference, other with curiosity or interest, and still others with enthusiasm.

5.5.2.3. Replication

Families were challenged to maintain or advance their class status. Education was central here, both as it was linked to purchasing the accoutrements of the middle class and as a marker of possessing the right attributes. The desire to ultimately control one’s own time and activities was a recurring theme in narratives and it was perhaps the ultimate status symbol in most families we observed. Class reproduction was complex and convoluted in Silicon Valley. For example, the time of original arrival was critical to finding affordable housing and desirable schools. People with comparable incomes lived in vastly different circumstances depending on whether they arrived in time to make a down payment on a home. The irrelevance of national income indicators is indicated by informant comments that, by definition, middle class households must have incomes of between of \$100,000-150,000.

Parents devoted considerable time and effort to children and their futures, especially their education. We have previously discussed education as a way to gain control over the context in which logistical demands are made. Here we just note that the issue of control over time is closely linked to ideas about power, wealth and class. In the Tran family home, on the wall overlooking the dining table, was a large poster of a seaside mansion with several exotic cars. It served as a message to the children to become highly paid professionals so that they could afford these items, buy an expensive house for their parents, and establish a permanent home where they could also live as adults with their families. The role models held up for these children were their cousins in a nearby family: every adult child had a professional job or was in a professional school. Sometimes the connection between education and time was direct: certain jobs allow their practitioners more autonomy that translates into control over time. That control is, in turn, an important status marker. At other times, the connection was indirect, as when children saw or heard that greater wealth allowed someone to purchase services that allowed them greater control over their time.

Family was also a vehicle for replicating ethnic identity. Often this was accomplished through daily cuisine. Fried bananas distinguished the Smith family, for example, while challah did the same for the Schwartz family. Special activities also help replicate ethnic identity. At Sonja Schwartz' Bath Mitzvah party one of the evening's highlights was the mandatory Israeli folk dancing. Most of the guests performed this dancing only at such events where it served to distinguish the family as Jewish.

5.5.2.4. Doing Family

The families defined themselves in terms of their relationships and indeed, they took for granted this way of defining family. But they also defined it by a set of activities. References to "doing family" and to activities that define the family are ubiquitous in our fieldnotes. This "verbing of family" ironically increased the sense of time pressure since activities by definition take time to complete and so they compete with other activities for time.

Sometimes errands defined "doing family." A trip to Staples stationary store to buy calculators and office supplies underscored the nature of the Schwartz family as one comprised of knowledge worker who were educationally oriented. For the Carson-Rogers family, a trip to a Whole Foods natural food store highlighted the role of health care and health consciousness that is integral to their identity.

5.5.2.5. Buffering the Core

This report has called attention to families as sites of cultural creation and adaptation to the exigencies of work. Equally important, the fieldworkers also found that the families struck created a core of practices, identifications or values that it then protected or buffered. Many narratives addressed this core, as when members reflected on what was essential to them as a family. Accordingly, some practices were seemingly easy to jettison and others were easy to try out, but altering elements of the core was more problematical.

Often the core was more an article of faith than a set of observable activities. For example, the Allen-Rodriguez family bustled with activity and Suzanne sometimes grimaced as she hurtled down a familiar freeway one more time to move children between destinations or to take care of her elderly mother. The contemporary family core was about offering care and compassion to those who needed it, and the dream was of retiring soon to live in a newly constructed "dream house" atop a Sierra Nevada ridge. Family members had loose attachments to possessions, including houses and vehicles, which were frequently converted to cash in order to secure the dream house (i.e. to buffer the core).

For the Smith family, the core had to do with their place in a multicultural world. As Mardi, the youngest child, approached kindergarten age, the family faced selecting a public or private school. The decision was not easy. Both parents had worked in public education and were strongly committed to the system. However, they believed that

multiculturalism was “handled poorly” in the local school system since it was featured in the curriculum only on holidays and ethnically identified months. The family strongly identified with living in multiple cultures and valued being able to work in them simultaneously. Feeling that the public school did not cultivate cultural competence, they decided to place Mardi in a private international school where the presence of multiple cultures was a constant.

For the Tentori family their core centered on conservative Christian religious values. Their eight-year-old son often proclaimed that he wished to become a minister when he grew up. While at an assembly at his public school, he mentioned God and the Bible. For this, he was publicly singled out and criticized in front of all the students and told never to mention such topics again at school. He did not tell his mother; she found out from another parent. She was upset, not that the school prohibited the mention of God, but that her son was publicly humiliated. Because of this incident and other reasons, the parents removed their son from the school at the conclusion of the year and enrolled him in a private religious school.

Because buffering the core is inherently conservative, it provides a useful context for assessing some family practices and narratives. Specifically, it suggests that some culture creation might be undertaken to maintain continuity of meaning in the family, and not to transform it into something radically new and fundamentally different.

5.5.2.6. Family Dramas

Finally, each family had a distinctive drama that it produced and reproduced. Team members commented that a family’s drama was often glimpsed at the initial meeting or during the first day of fieldwork, throughout the fieldwork, and it was the object of questions during the exit interviews. The dramas thus endured and they provided a context for jokes and jibes, incidents and aides during the months.

Drama was literally the motif for Carson-Klein-Rodgers family gatherings. One son, Derek, is training to be a professional actor. Ethan, at least while in high school, performed regularly as a singer and actor. Debbie was a historical re-enactor who acted out historical skits as part of her new career as a historical interpreter. The family performed, and performances brought friends, fictive kin and relatives together, providing them with a common frame of reference.

For the Trans, the drama of their family was survival. Husband and wife separately had survived perilous escapes as refugees from Vietnam; in the United States, they had invested their life savings in a business, which had failed. They tried to keep the economic crisis from their children by attempting to maintain the appearance of economic normality, such as stretching their budget to keep their children in various after-school activities. Nevertheless, the children sensed that something was wrong, particularly in light of their father’s changed behavior. Feeling shame at his failure, the father withdrew from visiting his economically successful relatives and instead, he spent long weekends alone on his small boat, fishing in the Sacramento Delta.

5.5.3. Consequences and Implications

The preceding issues of identity have several consequences or implications for dual career families.

5.5.3.1. Contradictions

The processes of identity formation we have described are not seamless and integrated. Contradictions and inconsistencies between different practices and narratives were commonplace. Attempts to simplify one part of a family's life were sometimes justifications to purchase new communications devices that ultimately increased complexity. Likewise, one person's effort to arrange "efficient" logistics frequently complicated someone else's day.

To return to an earlier metaphor, juggling and balancing connote an ultimate end-state of equilibrium that we did not see. Instead, we saw families that were simultaneously conservative and innovative, unified and fractured, sure and uncertain. Above all they coped with tensions that failed to correspond in any simple, direct way to work and family.

5.5.3.2. Shaping Daily Life

The long-term context-controlling efforts we witnessed affect a family's logistics and patterns of being in contact. Educational goals for children, for example, shape the choice of schools, classes and a wide range of extra-curricular activities. Preparation for a career change that will hopefully provide more control can reduce someone's immediate capacity to provide logistical support or be in contact. Indeed, we argue that many logistical demands can only be understood as efforts to control context in the future, and perhaps even the next generation. It is precisely here that fundamental values and assumptions about family, work, community, and identity converge to shape everyday life, often with complex and unintended consequences.

5.5.3.3. Imaging

We were struck by the attention the families devoted to developing images that were used to inform child rearing practices and socialization, decisions about jobs and careers, and the activities and values of families. We found evidence of a sort of "self-consciousness" in which families grappled with issues of who they are, what they should be, and how they can make themselves into that which they desire. These ruminations did not typically occur during formal family meetings, but rather they accompanied many of the large and small decisions that occurred daily.

5.5.3.4. Self-Referential Universes

Finally, the team marveled at the self-referential universes each family constituted. They were different from each other in many ways, and yet each seemed to have a logical consistency that made it difficult to be other than it was. Indeed, we soon stopped scheduling fieldwork sessions with more than one family on any day: It was too difficult to enter and leave and then enter different family logics, including those of our own families.

The Carlsbergs nicely illustrate the idea of a family as a self-referential universe. The parents were explicit that there were two ways to manage the family economy. One way is to make more money and the other is to shop sales and to purchase many non-branded, less expensive goods. They argued that Silicon Valley is a place where everyone uses the former strategy, while they pursued the latter. The logic was irrefutable, given the assumptions, and indeed it guided their purchasing decisions. However, another strategy, that of reducing the extent of consumption, was never discussed. Instead, the family was committed to maintaining a very large house, to investing conservatively while avoiding risky career moves, and buying as frugally as possible.

The Carlsberg “universe” thus cohered and it was difficult for them and the fieldworker to imagine it other than it was. Each family thus cohered in its own distinctive way, but that coherence reflected basic assumptions that could, of course, be different than they were.

6. Significance of the Project

This project began with a set of objectives that we found compelling, and implementing it made an impact on our lives and careers. It is thus worth addressing its significance, while acknowledging that such an assessment is not really ours to make. Nonetheless, the team can make explicit what its members believe and hope they have accomplished.

6.1. Why does this project matter?

We believe it matters for several reasons.

First, the fieldwork captures data that are unavailable using other methodologies. These data reveal that the impact of work and jobs on family (and the reciprocal impact of family on work) is far more complex and profound than indicated by measures of time “at work” and “in the family.” Most significantly, work is shown to be not just a driver of stress and source of problems, but it is also a resource drawn upon to address myriad “family problems.”

Second, the fieldwork allowed the team to develop a conceptual framework that is grounded in the everyday lives we studied. The most significant contribution of this framework is that it dissolves work and family as real, natural entities. Instead, it focuses on narratives and practices that simultaneously draw upon and integrate the cultural domains of work and family.

Third, the project explicates the hidden material, social and ideational infrastructure that underlies work and family. This infrastructure is a largely unacknowledged constraint on individual and institutional decision/policy making about work and family issues.

Finally, the fourteen families who allowed us into their lives suggests the variability in how work and family intersect, and they reveal the importance of seemingly insignificant, idiosyncratic factors in shaping the everyday lives of family members. The importance of culture and class backgrounds in shaping practices and narratives is especially striking.

6.2. What are the contributions of an anthropological-ethnographic approach to the study of work and family?

This project builds on a century and a half anthropological tradition of comparative research on work and family. Such an intellectual perspective allows us to problematize the very assumptions we adopt in order to conduct research. The process of engagement with people as they live their lives informs how those problematized assumptions are modified.

Ethnographic fieldwork allowed the team to develop relationships with family members that are deeper and more complex than possible in survey research. It facilitated *in situ* interviewing with people in the context of the activities and events being discussed. This enhances the salience of accounts since people are spontaneously talking about what they believe is important, rather than answering questions about what a researcher deems important. Fieldwork also allowed the team to observe behavior, and not simply rely on reports of it. While the latter reports are indeed an important source of anthropological data, much that people do is either incompletely reported or even inaccessible to them. The duration of fieldwork also permitted us the luxury of tracking family and work practices over a year. This allowed the team to see both areas of change and continuity, as well as to assess the relationship between what people say and what they do.

An anthropological approach is based on the perspectives and understandings of the members of the families, rather than on the hypotheses of researchers. It allows us to capture, for better or worse, how ordinary people see their lives, the challenges they face, and the ways they try to meet them. This process is far from perfect and anthropologists do not claim they are without their own interests and biases. However, there is a commitment to examine those researcher interests in the context of what the people we study say is important and how they live their lives.

Finally, it bears noting that these anthropological contributions are offered as complements to the contributions of other disciplinary perspectives and not as their replacements. We do not claim any sort of primacy for our approach, only that it allows us to see and understand facets of the work-family intersection that would otherwise be overlooked. Indeed, we believe that the integration of different research traditions offers the most fruitful path for future research.

6.3. What is our specific contribution in being the anthropologists in question?

In addition to the comparative expertise of the team, we remain convinced that our previous National Science Foundation funded research in the Silicon Valley region (Work, Identity and Community in Silicon Valley) profoundly enhanced our ability to focus on important issues of work and family. We are also convinced that the Silicon Valley region serves as a natural “laboratory” for the study of work and family. The “experiments” in this metaphorical laboratory are particularly concerned with work as a dominant theme in everyday life, using technology to integrate work and family, and living in a region where complex cultural diversity plays out in people’s daily lives.

6.4. What can this project contribute to the civic discourse about work and families?

We began this project with a commitment to examine how people tried to integrate work and family in ways that they believed “worked” for them. We made no assumptions that this integration would be perfect, but we did seek to avoid self-proclaimed “dysfunctional” families and an enumeration of family problems. Instead, we assumed that by looking at what people thought worked we would simultaneously capture their challenges, threats and problems.

Our primary hope for this project is that it can contribute to a discourse about work and family that reflects how people actually live their lives. We hope to contribute to shifting the discourse on work and family from one that is often value laden in assuming that there are “correct” answers for families in general. Instead, we have tried to respect the moral reasoning of families as they try to grapple with issues of everyday life that have enormous implications for them and their communities. We hope then that our contribution is to describe how family members engage in this process and to provide a deeper understand of it through our analysis. We hope to provide an analysis (in a cross-over book currently being written) that contributes to a larger understanding of the consequences of specific individual and institutional decisions, but that analysis *per se* will stop short of normative recommendations for families and organizations.

7. Next Steps

- Darrah and Freeman will complete *Remaking Everyday Life* by February 1, 2002 and submit it to Palgrave Publishing. This crossover book is an ethnographic study of everyday life in the region and it supports both the project on dual career middle class families and the book that results from that research. Writing the book is being partially supported by a program officer grant made by the Alfred P. Sloan Foundation to Darrah.
- Darrah, English-Lueck and Freeman will draft *Families in the Eye of the Storm* by September 2002 and revise it as needed for publication. The team may decide to work directly with a publisher and secure a book contract prior to the completion date, or it might try to work through an agent that has previously expressed interest in our research. Writing this book, too, is partially supported by the same program officer grant to Darrah.
- Darrah has been invited to be visiting professor at the Center for Work, Technology and Organization, Stanford University during AY 2001-2002. This affiliation will provide additional intellectual support for the writing projects.
- The members of the team will continue to develop discrete components of the project into scholarly papers. Although we are not attending the 2001 American Anthropological Association annual meeting we plan to organize a session at the 2002 meeting in New Orleans. Likewise, we hope to remain active participants in the network of Sloan Centers for the immediate future.
- During summer 2000, we met with Professor Marietta Baba and several of her colleagues at Wayne State University about the feasibility of conducting a Silicon Valley-Detroit/Midwest comparative study of dual career families. Professor Baba has since left Wayne State to become Dean of the College of Social Sciences at Michigan State University, but the project remains on track. The Michigan State/Wayne State and San Jose State teams will refine a set of dimensions along which to make regional comparisons of families. Our Michigan colleagues will then conduct fieldwork in the Detroit metropolitan area and the San Jose State team will analyze their existing field notes using the agreed upon categories for comparison and assist in training fieldworkers. The result will be a comparative study of families and work prototypical old and new economy regions. Baba is currently drafting the complete proposal for this project. She will be working with the J. Walter Thompson Company to secure corporate funding for the Detroit fieldwork portion of the project. A larger project goal is to enhance practices by which anthropological data and findings is used to inform a range of organizational functions, ranging from product development to human resources policy. The MSU/Wayne-SJSU team will be seeking additional funding for this phase of the project.

- Darrah and English-Lueck will continue to build upon the collaborative work on social networks they are undertaking with the Institute for the Future. We believe this approach is a fruitful one for conducting comparative studies of children and adults in different regions of the United States, as well abroad. A goal of the research will be to understand the effects of different networks on connecting cultural domains such as work, entertainment, religion, household and education. The approach also reflects our interest in what has been called the “digital divide” between those people who will benefit by the opportunities provided by new information technologies and those who will be left behind. We believe this formulation is misleading because it assumes that the cause of and solution to economic polarization resides largely in access to technology and technical knowledge. While these are important elements, our preliminary research suggests that access to different kinds of social networks is at least as significant.
- Darrah and English-Lueck will continue their on-going collaboration with Andrea Saveri at the Institute for the Future regarding the future of the household. This research often informs and is informed by in-depth ethnographic work such as this project. However, the work with Saveri is more speculative, identifying social innovations in households, youth and global knowledge workers. The work is more explicitly cross-cultural, drawing on Silicon Valley based research, but also complementing research done in other major metropolitan areas around the world, such as London, Tokyo, and Stockholm.
- Freeman will continue to serve as a founding board member for a high tech start-up company that is working in Vietnam. His duties permit and require that he document the intersection of work and family under conditions of technological change and global migration.
- The team is committed to convening a workshop comparable to the one proposed to the Advanced Center for the Behavioral Sciences at Stanford, and it will seek opportunities to do so in conjunction.