

An Ethnography of Lists in Mothers' Work

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ABSTRACT

This paper presents the early findings from an ethnographic study of mothers' work and specifically mothers' uses of organizational artifacts, i.e., lists. Through the detailed examination of these artifacts and their everyday use, the findings suggest that mothers' work is highly complex, demanding the negotiation and management of multiple, fragmented and often competing activities. The findings provide preliminary pointers for practitioners aiming to design organizational tools for the home.

Author Keywords

Mothers' work, women and technology, home life.

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION

In this paper, we report on an ongoing ethnographic study of *mothers' work* in the home. Not surprisingly, our findings have revealed that the time-honored image of mothering as being an innate, 'natural' facet of women's lives, in fact, obfuscates the actual work done by mothers. Of course, our findings have confirmed that certain aspects of home- and childcare do fit with the established depictions of home life. However, far more pronounced is the continuous juggling of disparate activities and orienting to disjointed 'worlds' that mothers must contend with in interleaving domestic chores, household maintenance, family health concerns, school relations, household finances, the coordination of children's and family's social lives, etc.

In examining the work of mothers, we have chosen to focus on the practical ways in which mothers accomplish these multifaceted activities in and around the home. Emerging from this focus are indications of how interactive systems might be designed to support the organization of home life.

Specifically, our early findings suggest that the ways in which mothers routinely enroll and mobilize the list, as an organizational artifact, has important implications for the design of organizational tools in the home. In unearthing the nature of household arrangements and how they are continually produced in lists, one of our aims has thus been to explore how organizational tools might be best designed to support primary caregivers.

BACKGROUND TO RESEARCH

Despite the recent turn in the CHI and related work-studies literature to 'work' outside of the office and more specifically to the use of technology in the home, research into women's roles and *work* in home life has been scant, at best. The CHI-related research has, by and large, dealt with studies of the home that represent the homogenous 'user' or family [5], even though, at least in Western Europe and North America, a considerable proportion of home/child carers remain women [4].

Where systems design research has focused on women, the majority of work has been divided between measuring the differences between the cognitive and physical abilities of the different sexes [8] or examining women's roles in computing/systems design [3]. This focus has neglected and possibly downplayed the work that women do in the home; in part, it has contributed to what Maushart [4] and others have referred to as the "invisibility" of women's work, where the caring and home related activities, performed in large part by women, have been arguably marginalized because they are simply taken for granted [2].

In this paper we have chosen to give specific attention to the organizational component of mothers' work and, specifically, their use of lists. One reason for this focus is that it offers a means of getting an empirical handle on women's roles and of further interrogating mothers' routines. As such, lists are seen in a similar vein to what anthropologist Clifford Geertz has referred to as *cultural texts* [1]—witnessable testaments to established social practices and customs. A second reason is that this realm of mothers work is considered to be one that technology might be designed to support. With these two points in mind, the paper weaves mothers' patterns of using lists with the potential for emerging technological solutions.

The data presented in this paper are drawn from ongoing interviews and field observations with five mothers from

middle- to high-income families in London. The women, all ‘full-time’ mothers, form a close network of friends. All the mothers have at least two young children, and all have a four to five-year-old child in the same nursery class. The women and families were chosen because the aim was not only to investigate the independent work of mothers in the home, but also to examine if and how women work collectively in the domestic context. Notably, the focus on the socio-economic group is recognized as one limitation of this study—clearly they are not representative of the large number of women that work in the home. It is hoped that this project will be a part of a growing body of research on this broad topic by investigators in the fields of HCI, CSCW and elsewhere.

PRELIMINARY FINDINGS

On close inspection, it would seem that what lists provide is a way for mothers to negotiate a complex and often competing litany of demands. For mothers, the running of the home is achieved through the careful orchestration of the fragmented worlds of family members, activities, events, household chores, etc. Lists offer a means of marshalling these people and things so that they can ‘neatly’ operate within the established order of the home.

A serious hurdle to what is ostensibly the organizational component of mothers’ work is the divide between the demands of childcare and the myriad of other activities that make up domestic life. What is sometimes overlooked, or possibly unapparent to non-parents, is that children do not fully understand the social rules that govern ordinary behavior and/or are not altogether willing to conform to the established social order of home (and adult) life. This can make the accomplishment of domestic tasks and activities a serious challenge. For example, most mothers will think twice about a grocery-shopping trip with a two year old who is near to either a nap or meal time. It is in this context that lists act as markers, bridging the divide between the ‘outside’, adult world and the chaotic world of children. This more subtle but crucial role of the list and its relationship with the arrangements of home life we now turn to.

Form and Content of Organizational Artifacts

All the mothers in the study relied on some type of list, but the forms varied considerably. Anya (six months pregnant and the mother of a son of 4 and daughter of 2), for example, has several legal pads and a diary, which she places strategically within her home, forcing her to walk by them several times a day depending on her activity, to act as constant reminders. Carrie (with a son of 1 and daughter of 4), on the other hand, rarely uses paper and instead relies on calling her home phone from her cell phone and leaving herself messages on the answering machine. Kate (eight months pregnant and the mother of two daughters, 2 and 5), scribbles notes down on to the backs of envelopes, which she explains invariably disappear. She finds the act of making lists, however, helps her remember what needs to be done.

As for the content of lists, the ways in which items are recorded and arranged can appear, at first sight, chaotic. We find, for instance, that household chores are clumped together with doctor’s addresses, reminders for husbands, phone numbers, shopping lists, and arrangements for children’s birthday parties. Indeed, it appears to be one big collection of miscellany. Let us, consider the use of notebooks by Amanda, the mother of two girls.

Amanda typically has several notebooks any given time dedicated to a variety of activities. The determining factors for whether an activity warrants a separate notebook seems to be how much information is being generated on the particular subject. For example, her house is being renovated, and she has a notebook dedicated solely to that project. She also runs the parents association at her daughters’ school and is involved in fundraising and has a separate notebook relating to that. However, in the interests of compactness, portability and convenience, she deliberately limits the number of notebooks she has at any one time. Through this use of notebooks, we see a simple means of categorizing or dividing up some of the activities which Amanda engages in as a mother, one that relies on the material features of paper and specifically notebooks [6].

In a page from the notebook Amanda carries with her when she is out and about—her daily, catch-all notebook for jotting things down that come to mind during the day—there is a mixture of items, beginning with “Sort out summer clothes” and ending with “read menopause info”. What is apparent from this list is that the categorization system Amanda uses by having separate notebooks does not apply. Rather than categorizing by activity, she uses a chronological means to group items—items get clumped together on the basis of being important for that day or moment-in-time. The methods employed to categorize items are open to change and are situationally dependent; categories can be *produced*, if you like, on the fly and to suit the occasion.

Categories and the Moral Order of the Home

In itself, this way in which lists are ‘occasioned’ for the situation at hand is not news. Numerous other researchers examining systems design have made similar observations [7]. Specific to mothers’ work are the ways in which items are divided (either into separate diaries or sometimes into groups within lists) does a special sort of ‘reconfiguration work’ through which a *morally implicative order* to home life begins to emerge. In illustration, let us turn to an excerpt taken from a discussion with Anya.

I tend to have one big page, a column on the left, a column on the right. There’s what you might call the kind of financial and administrative stuff, and that’s usually the main column, pay x bill, sort out car insurance, the sort of stuff which really matters if you don’t do. And then I would probably lower down the page have the kind of ‘where are Tom’s socks?’ I kid you not.

The list itself can be used to classify particular types of tasks and activities. By separating out household finances from mundane chores like finding her son’s socks, Anya is quite deliberately carving-up and configuring home life.

Dividing the page into columns and rows, she sections out home-work into orderly slices, a broad collection of tasks and activities that get done in the home, grouped and ordered into things that ‘really matter’ and those less important ‘to-be-dones’. The list then serves as a helpful delegation device, configuring home-work and transforming it in to its right and proper order.

Through this prioritization of listed items, a moral order of the home emerges. From Anya’s description we hear that socks get placed lower down on the page than “financial and administrative stuff”—a clear reminder of their status. Anya’s last four words in the excerpt above, “I kid you not”, do quite a bit to show where things stand in this hierarchy and go some way to explaining why. By using this phrase, Anya confirms that she is well aware of what we all know to be true (i.e., common sense)—that socks come after bills and insurance. The list then, in being used to prioritize work, reaffirms the moral character of the things that need to get done in the home.

The Merging of Worlds

The trouble with this reconfiguration and ordering is that it by no means emerges as a natural consequence of combining the various activities, events and people that are a part of home life. On the contrary, the work of mothers does not only demand coordination of multiple and disjointed activities, but also fusing what are, for all intents and purposes, ‘worlds’ operating in stark opposition to one another. We get a sense of this in a conversation with Claire (mother to children of 8, 4 and 2):

I find switching between child time and normal time the worst. The days I just do children, and can just slow down... do things the way they do instead of rushing around, getting things done... Sometimes it’s better if I just have child time, or just have normal time. I have the least patience when I’ve had a day when I’ve been getting things done and then I have to switch back to their time.

Claire invokes a palpable division between the world inhabited by children and that of “normal time”—the world where things get done. We can glean from this that there is no simple fit between the demands of childcare and the rest of domestic life, and that a considerable amount of work is demanded of mothers to coordinate the two. In a sense, we might see lists as a reification of this achievement, embodying the substantial mental thought and physical effort that mothers must put into planning, arranging and pulling off the running of the home and the care of children.

The Hidden Work of Mothers

A final line of reasoning that emerges from the argument we have presented is that through employing the organizational systems and methods we have so far discussed (as well as many others), mothers can obscure the complexity of their own work. That is, by rendering the chaotic worlds that revolve around family life in the form of lists mothers conceal the considerable undertaking that is needed in the smooth running of the home. To unpack this possibly con-

troversial point, let us take a look at an excerpt from an interview with Kate.

Asked whether her husband transfers the content of her written lists to his PDA, Kate replies: “No, not really. Often they’re quite domestic lists which I have. If I involve him in the list, it’s because I’m expecting him to do something, *effectively*. And which sometimes works quite well, if he’s in the mood. Umm, or sometimes it’s because I’ve been asking Nick to do things, certain things, and I’ve given up and I’ve decided that I’ll have to do them. I mean, on our kitchen table at the moment, there is a humungous list which I wrote when I got bored with cleaning cupboards this morning. I’ve got a feeling this is going to metamorphose into a bigger list that’s got something to do with feeling a baby coming and wanting to make sure that you’ve done a whole load of filing, paid bills, you know, make sure that everything’s up to date and being scared that you’ll forget things because I know, if the baby turned up tomorrow, um you know, 90% of my lists would be erased from my brain because I couldn’t help it because that’s what happens. So you know, thinking actually I need to keep it all down somewhere. It’s funny, lists. The world feels better when I have a list, maybe just because I don’t have to remember it all but the world feels... the same way the world feels better when the house is tidy and all the toys are in the right place.

What we see in this excerpt is that for Kate, like Anya, lists are delegated the job of making the world orderly. Kate, of course, is well aware that ‘chaos’ is an ordinary feature of the home. In composing lists, not only does she make the world feel “better”, she tidies up the chaos by putting things in their “right place”. However, what she also does is diminish the efforts of her own labor, sanitizing the real messiness of her work behind the supposedly ‘*natural*’ rhythms of home life. This is apparent not only in the carrying out of *her* duties but also in the delegation of work to other family members. In talking of how her lists “come out” to alleviate the stress of having so much to arrange, Kate explains that lists also provide a means of communicating the orderliness of the home to her husband:

Something often gets put onto a list by the end of the weekend cause nothing’s got done and I’ve got stressed about it. And then, eventually, a list comes out. So generally speaking, the lists come out when I’m with Nick. It’s also a way of communicating to him what needs to be done cause he hasn’t got a clue.

Describing how a list can be used to delegate “something”, presumably some task or activity, Kate reveals that the list is more than a mere itinerary of what must be done, but also serves as an implicit reminder of *who* has got to do *what*. Kate though, in both her excerpts, is doing more than merely describing how lists can be used to assign duties. In her first excerpt, notice how she assigns certain sorts of lists to the “domestic” world and, within the same turn, depicts this world as under her authority. Kate takes possession of lists of the *domestic* variety and places herself in the position of managing who has access to the tasks and activities they refer to. Similarly, in the second excerpt, but in a more emphatic manner, Kate implies it is she, and not Nick, that has a “clue” on the matters that lists pertain to—on domestic matters.

The point here is not whether Kate is right or wrong in her delegation of domestic-work, nor whether she is right to assign herself as an authority on such matters. What is revealing is that she is quite specifically delegating the right and proper place for this work and that, in this case, it is the list that is mobilized to do this delegation. What is central is that Kate's carving up of the home's activities into manageable lists and her subsequent division of labor to undertake those activities sequentially transform what was once chaos into the taken-for-granted arrangements of the home. By invoking these taken-for-granted arrangements, home life is seen to have always been orderly and, thus, the (mothers') work needed to achieve that order is considered to be inconsequential, quite simply invisible.

CONCLUSION AND IMPLICATIONS FOR HCI

In this paper we have built up an impression of how mothers' work is supported, in part, by the use of lists. Through these artifacts, a disparate assemblage of things and people, operating in different renditions of time and place, are transformed into compartmentalized collections of tasks and activities ready to be resolutely crossed out once completed. With respect to HCI, the question remains how such findings might contribute to system design. At this early stage of the research, we would like to suggest there are both practical and more abstract implications.

On a practical level, our close examination of the use of lists in the home point to a number of broad design suggestions. For one, we find that the organization of home life is embodied in various forms arranged to suit individual needs. For designers, this suggests that they need to offer multiple methods to input, store and physically arrange organizational information—methods that allow for the movement between the social and physical environments that family members routinely traverse. Similarly, with the methods for categorizing information being diverse and sometimes changeable, designers must build systems that accommodate the creation of ad-hoc categorization schemes that can be amended on the fly, and also allow for information to be easily reassigned when a spare moment is found. With a sense of some specific location in the house (usually the kitchen) where this information comes together and is marshaled, designers might also consider the implementation of a hub-like system where family members are all able to communicate with a centrally displayed/located repository through different devices, such as landline and cell phones, PDAs, laptops, desktops, etc.

For mothers, in particular, thought must be given to how organizational tools might support the coordination of disparate worlds and times. Technologies should enable mothers to visibly represent and arrange the multiple worlds the family inhabits so that points of convergence (and possibly tension) might be better coordinated. They should also allow for the mutual organization of activities amongst family members, not merely to produce sharable solutions, but to allow for the established order of the home to be conveyed and reinforced to all family members. One solution to this

might be some form of graphical representation that captures the organizational logistics of who needs to be where when, as well as providing simple access to the details of the activities such as names, addresses, birthdays, etc.

A more abstract implication that emerges from the study is a tension between what mothers do to successfully accomplish their work and how their work is made (in)visible. On the one hand, we find mothers coming up with a collection of resources and methods to make their work manageable amongst their mass of interleaving and competing demands. On the other hand, we find mothers 'producing' their work as an unremarkable and seemingly natural feature of home life. This is the stuff of being a 'good' mother, but it also serves to disguise or hide the hard work that goes in to juggling multiple tasks, activities, people, times, places, worlds, etc. What is apparent is that there is something of a moral order being preserved here, something that is arguably not altogether in the best interests of women.

Implied in this point is the accountability of HCI practitioners and designers in their craft. It raises the question that if solutions are considered to streamline some of the organizational activities that mothers participate in, to what extent are they contributing to the process that is making the core of mothers' work invisible? The problem arising from the presented research is that the optimization of the organizational work involved in mothering does not do away with the inevitable hard work of running a home and taking care of children, it simply eases the management and integration of the multiple activities. Crucially, it can also mask the hard work itself. For practitioners and designers, then, careful thought must be applied in designing solutions that might support household organization. Designers and practitioners who wish to take on this challenge have the difficult task of building technologies that support organizational work but, in some fashion, make visible the heavy and complex demands placed on mothers.

REFERENCES

1. Geertz, C. *The Interpretation of Culture*. Basic Books, New York, 1973.
2. Haraway, D. J. *Simians, Cyborgs, and Women*. Routledge, New York, 1991.
3. Klawe, M. & Leveson, N. Women in computing: where are we now?, *Communications of the ACM*, 38, 1 (1995), 29-35.
4. Maushart, S. *Wifework*. Bloomsbury, London, 2002.
5. O'Brien, J., Rodden, T., Rouncefield, M., & Hughes, J. At home with technology, *ACM Transactions on Computer-Human Interaction (TOCHI)*, 6, 3 (1999), 282-308.
6. Sellen, A. J. & Harper, R. *The Myth of the Paperless Office*. MIT Press, Cambridge, Mass., 2002.
7. Suchman, L. A. *Plans and Situated Actions*. Cambridge University Press, Cambridge, 1987.
8. Tan, D. S., Czerwinski, M., & Robertson, G. Women go with the optical flow, *Proc. CHI 2004*, ACM Press, (2003), 209-215.