

Everyday Practices in Great Rooms

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Abstract. We discuss an empirical study of American households with “great rooms” (large multipurpose spaces, often incorporating living, dining, and kitchen areas) and wireless laptops. This study is designed to reveal day-to-day practices and values around resource sharing, negotiation of privacy boundaries, and territoriality (of both people and devices). We focus specifically on domestic spatial practices and how these are influenced by architectural constructs and the mobility afforded by wireless networking.

1 Introduction

We are interested in designing technologies that can be naturally integrated in domestic routines and are consistent with existing values. As a preliminary step, we have conducted a study to examine day-to-day spatial practices in the home and how they interact with technology. More specifically, we are interested in how domestic spatial practices are affected by architectural constructs and the mobility afforded by wireless capability for laptops.

2 Study

To explore day-to-day domestic spatial practices, we are conducting a study of American households which meet three criteria: (1) they have great rooms (large open spaces in homes that often combine kitchen, eating, and living areas [2]), (2) they have wirelessly networked laptops, and (3) they have multiple inhabitants.

We have chosen to study homes with great rooms because these spaces ostensibly afford greater household “togetherness” and express notions of modernity, multifunctionality, and informality, bringing issues of privacy and resource sharing within the family to the fore. While great rooms are strongly associated with suburban American architecture, they are also an emergent aspirational meme on a more global scale, with great rooms appearing in, for example, upscale developments in China [1].

We have chosen to study homes that have laptops using wireless networks because they afford in-home mobility. We are examining how such devices integrate with and/or impact everyday routines. While there is obviously a sense in which laptops

are “remarkable” objects, there are also numerous processes by which they become less remarked upon and naturally integrated into everyday routine. By studying these, we hope to gain intuition for the design of “unremarkable computing” [4].

Finally, because we are particularly interested in the relationship between social interactions and the use of technology in the home, we are focusing on homes with two or more inhabitants. Of special interest has been the ways in which rooms, or parts of rooms, are appropriated by household members, and how norms are arrived at regarding what belongs where.

In our initial pilot study, we visited six homes in the San Francisco Bay Area in California and the Portland/Vancouver area in Oregon. To study the homes, we used contextual interviews, essays, diaries, and time-lapse photography.

3 Themes

Our findings have a strong relationship to the themes of the workshop.

- *Interaction design*: Our data includes time-lapse photographs of great rooms, showing people interacting with their environment, technology, and each other over an extended period of time. We consider how interaction takes place at different time scales, architecturally and with different objects and in different locations. For example, laptops seem to have a somewhat privileged status in the great room because they can be removed easily or set aside when desired. All households in our sample used laptops in the great room, while only one household in our sample had a desktop computer in the great room (although many households had desktop computers elsewhere in the house).
- *Accountability*: Great rooms are public and shared spaces in the home which demand accountability. Our findings reveal practices related to acceptable use of space, clutter management, and ownership. For example, since great rooms are front stage areas of the home, it appears that household inhabitants are generally accountable to keep them (more or less) free of clutter. Temporary projects, such as laundry folding, appear to be more acceptable than longer-term projects, such as spreading out papers and books related to a term paper.
- *Awareness*: Great rooms are typically positioned such that they are strongly connected to other spaces in the house, for example providing parents greater awareness of children’s activities. The types of awareness that are revealed to be useful may have implications for the design of technological awareness applications.
- *Tangibility*: Great rooms are strongly associated with the embodied enjoyment of physical properties such as light and space. These properties in some cases seem to be at odds with technology such as that which delivers media. For example, concepts for home theaters often involve darker colors and highly controlled exterior light. In one of the households, the primary “owner” of the great room had decreed that television was not allowed (except with a portable projector which was brought in at special times to display movies on a two-story wall).
- *Coordination*: Because great rooms are typically shared spaces in the home, their use is often coordinated. Our findings revealed many tacit coordinations across time and space. For example, great rooms are appropriated by different house-

hold members at different times for different activities. Notions of primary and secondary ownership also play a role in these coordinations. In one household the great room was considered “mom’s room.” In her absence, however, it might be used by other members of the family, e.g., the father took a nap there while she was at work.

- *Context:* Wireless laptop activities are highly contextualized by location in the home, as well as by the presence of other people. Their status as a remarkable or an unremarkable object appears to be highly context-sensitive, as they become the focus of attention or are set aside as a book or a magazine might be, depending on the activities in the room.

4 Future Work

Our initial sample of homes included one home with grade-school age children and one home with teenage children. Naturally, the presence and life-stage of children in the home has a dramatic impact on issues such as parents’ need or desire for awareness. Further, as Madigan and Munro observe in their study of open-plan living, sharing of a single communal space becomes particularly challenging as children mature and develop a greater need for privacy when entertaining visitors [3]. We hope to collect additional data on households with children since such homes bring many of the issues raised above into focus.

We also believe it would be informative to compare the use of great rooms with the use of smaller spaces, such as urban apartments, shared by similar numbers of inhabitants. We are in the process of examining the affordances of great rooms, and considering how technology might be used to provide some of these affordances in smaller spaces.

References

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