Pottering: A design-oriented investigation

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Abstract

In this paper we examine a ubiquitous yet overlooked aspect of home-life, pottering. The *Oxford English Dictionary* defines pottering as "To occupy oneself in an ineffectual or trifling way; to work or act in a feeble or desultory manner; to trifle, to dabble." It is thus a term used to describe a variety of activities but none in particular. Below, we give shape to the practice of pottering and in doing so aim to demonstrate how such an investigation has broad implications for HCI and designing for the home. We also report on our experiences of using design sketching as an analytical resource.

Keywords

Ubicomp, conceptual design, domestic technology

ACM Classification Keywords

K.4.m Computers in Society: Miscellaneous

Introduction

In this paper we report on a preliminary study motivated by an interest in what the British refer to as pottering. In choosing the topic, we wanted to give thought to how the home—as an idea or even ideal—fits with one's doing of mere 'stuff': the often small and unplanned efforts to mend something, flick through old photo albums, rummage in clutter drawers, and so on.

pottering, *n.*

1. The action or process of pottering, in various senses; aimless or leisurely activity or movement; the process of occupying oneself in a desultory but pleasant manner 2. Of work, etc.: done in a feeble, unsystematic, or ineffectual way; (hence) trifling, slight, paltry.

From the Oxford English Dictionary

In the following we will describe how our early investigations raised unanticipated outcomes in that they gave prominence to what might be described, rather grandly, as the social production of space and time. In their explanations of pottering, we found that our informants gave shape to different ideas of space and time. Notable were the ways in which different types of space and time were defined relative to one another, and how distinctions were regularly bound up with one's accountability to others. It also struck us that, despite their prevalence, the periods and activities associated with pottering often go unmentioned in people's accounts of home life; households are discussed and characterized in terms of what is achieved or what is accomplished. The ordinary, mundane activities that householders can seek solace in (like pottering), sit uneasily in these terms.

Reporting on this research, we also reflect on two design-related themes. First, we consider how our thoughts on time and space, although seemingly rarefied, offer lessons to draw on in designing for the home. Second, we aim to present our experiences of integrating design sketches into analytic phases of field research. Wanting to experiment with a tighter interleaving of early empirical fieldwork and design, we used sketches as resources to actively engage with ongoing field research, and to explore and provoke our analysis. The sketches in this sense were seen as active ingredients for further inquiry and not as ends in themselves.

Pottering at the Margins

Our interest in pottering as a research topic arose from our prolonged studies of family life in the UK. Over the course of our investigations we found that particular members of households have established routines in which they seclude themselves from their families. Finding a sequestered place (and time), pleasure is taken in mundane, seemingly unessential activities: loosely sorting and organizing things, tinkering with tools or equipment, doing odds and ends on personal computers, etc. This loose assemblage of activities intrigued us because it appeared to offer a real-world example of how the home exists beyond merely being a functional or utilitarian place, and of how, in practice, it can come to be a site of insouciance, playfulness, and even whimsical pleasure. Pottering was thus chosen because we imagined it to offer a way into exploring just the sorts of activities that are easily marginalized, and yet ever-present if not intrinsic to the home. We imagined the term as a catchall for activities that could sit to one end of a continuum, where at the other end we might find those things we do in a purposeful, planned and sustained fashion.

At a broader level, our interest in pottering has commonalities with recent research from Bell and Dourish [1] in which they examine the garden shed. They argue that the shed offers a counter-point from which to interrogate the taken for granted character of the home. It lies at the edges of the domestic realm, both literally and figuratively; this peripheral, arguably marginal status enables the shed to be used as a means to critically reflect on the prevailing ideas of home, and in doing so re-imagine the possibilities for design. Like sheds then, pottering can offer a counter-point from which to (re)examine the explored and unexplored in the home More broadly, we hope too that its explication can contribute to HCI's ongoing engagement with domestic technology design.

	Age	Sex	Pottering activities
P1	64	M	gardening
P2	62	F	gardening, tidying-up
P3	40	F	gardening, tidying-up
P4	30	M	spending time in shed
P5	34	M	gardening
P6	37	M	spending time in shed
P7	65	F	looking through photo albums
P8	41	F	organizing things, surfing the internet
P9	31	M	gardening, surfing the internet
P10	37	F	gardening, surfing the internet.
P11	21	F	tidying-up, thinking
P12	30	F	tidying-up, thinking

Fig. 1 Participant Demographics

Fig. 2 Disposable Video Cameras.
Participants were given the disposable video camera above and asked to record themselves pottering and reflect on their activities. A maximum of 20 minutes could be captured either at one time or through consecutive recordings. The aim was to have the video camera capture fleeting moments and thoughts.

It should be said that our use of the term pottering and characterizations such as those above may be largely peculiar to the British. Our motivations here are not to explicate a cultural practice in isolation, however. By introducing the term as a rhetorical device, as it were, our intention has been to use it to reflect on what people do with their time in their homes. Indeed, we are mindful that pottering—or something like it—occurs elsewhere under the guise of 'chilling out', 'wasting time', 'doing nothing', and so on, and that amongst its particularities pottering may provide some useful points of comparison when set against the mainstream, largely US-centric imaginings of what it is to live at home, with technology [3].

Method and Analysis
To gain an insight in to pottering, we interviewed 12 self-professed potterers (Fig.1). Participants were recruited by asking colleagues and friends and by posting recruitment flyers throughout our local city. Interviews took place at informants' homes and over the phone. To complement these and to help us better understand the actual experience we also asked participants to record themselves using one-time-use video capture devices (Fig. 2).

In presenting the results of our fieldwork, we want to acknowledge that our early choice of subject material—one that appears to slip so easily into the margins—raised unanticipated problems. We found pottering to be slippery in that it was not easily described, observed, or captured. Arguably confirming its marginal status, we found it took no precise form and had no commonly defined boundaries in time or space. If anything, we found the practice to engender a state of mind, or perhaps more aptly a way of being, rather

than anything concrete. Moreover, we struggled to identify a data collection method that would not make people aware of or accountable for their actions (aware that pottering appears to be made up of just the kinds of activities we find hard to account for). Mindful of these difficulties, our approach was to treat the collected materials as a open-ended resource and to work through the topics that we repeatedly encountered in our investigations. Rather than an exhaustive elucidation of pottering, the materials came to be a counterpoint in our continuing research into home life by bringing overlooked aspects of domestic life to the fore.

Importantly, design played a significant part in our analysis alongside the use of field materials. Early on, numerous design sketches were used to help express some of our findings and contemplate their implications for design. Over the course of the study, however, we found the sketches also opened up their own possibilities for investigation and fed back into the analysis of the field materials. The collective efforts of a designer and sociologist in the analysis fostered this interplay. Aiming to explore a design space, the designer sketched out probing and sometimes provocative designs. The sketches, in turn, injected new, unanticipated questions into the examination of pottering. In this way the sketches are similar to the proposals presented by Gaver and Martin [2], offering a collection of conceptual designs that could be, in some cases, critical in nature. Rather than develop working probes or prototypes, our interest, however, was to utilize sketching as a lightweight explorative technique.

Below, we present reflections on three topics that consistently arose in our fieldwork and analysis. We present aspects of each topic as illustrative of how potter-
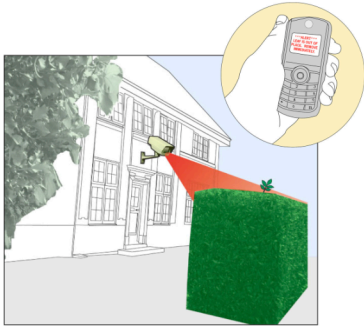
Fig. 3 Growth Detector.
Sensors placed on the outside of one's home monitor shrub growth. In order to keep them immaculately trimmed the sensors alert homeowners when a leaf is out of place. Users are notified via a text message sent to their cell phone.

ing provided us with mechanisms for examining and pressing on matters sometimes overlooked in domestic technology design.

The Unplanned

Something that immediately struck us in considering pottering was its whimsical character. Informants regularly described pottering as consisting of tasks and activities that have not been carefully planned or that might unexpectedly alter. Joanna, recently retired, expresses this nicely:

I just get waylaid, say I am doing the laundry, and then I see a book that I haven't looked at for a while and I'll sit and look at it and I should have done the laundry. The other day I was looking for a piece by Allan Bennet which is on a tape cassette to lend to someone, but couldn't find it because I was waylaid by other things and listening to other tapes thinking 'would she like this, would she like that?'

Joanna's use of the word 'waylaid' is evocative here. It suggests a movement through time and space, during which one is easily distracted or led off course.

We've sought to be playful with this seemingly capricious quality to pottering with one of our design sketches, the *Growth Detector* (Fig. 3). This concept aims to eliminate chance distractions. Instead, one is forewarned of the potentially unanticipated—the rogue leaf that demands the garden shears. By exaggerating the orderly conditions we aspire to and the efforts we might go to in order to plan for contingencies, the Detector encourages us to think, critically, about designing for planfulness. It highlights how we are, at times, open to being waylaid and that in their right and proper place distractions have their appeal.
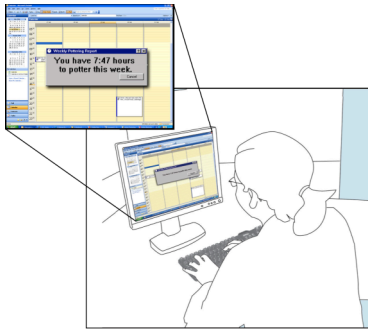
Pottering-time

What we don't wish to do here is characterize pottering as totally unplanned. Indeed, our informants regularly described pottering as something that it is often assigned to a certain place. Pottering is done in the garden shed, the attic, the basement, the clutter drawer, and so on. Interesting is that these spaces are situated on the edges or borders. Such demarcations of space are more than merely material. It would seem the home's physical margins also give shape to our understandings and experiences of homes, and how we organize ourselves, socially, in them [1].

In our study of pottering, we found temporal as well spatial margins to be similarly important. There are times to potter: weekends can be reserved for pottering or some leeway might be given once the chores have been done, and so on. In the following, Steve, provides an example of how time is apportioned (as well as echoing Joanna's comments on the unplanned character of pottering).

In general I don't sit down and plan an afternoon and just say I am going to sit around and not do very much. [Pottering] generally comes as a result of doing something else and finding something else halfway through that is more interesting to do or having sort of dead time, unstructured time, in which I like to fill it with doing something.

Notice how Steve describes when he potters relative to some other time. Pottering-time is dead, unplanned, unstructured, or as other informants described, insignificant. Using Zerubavel's [4] phrase, it would seem pottering-time is a *residual category* in that it is defined in relation to other types of time: not planned, not structured or not significant. Pottering is thus set in relational terms with respect to other structured activities

Fig. 4 Pottering Manager
This desktop application schedules pottering-time for busy individuals. By searching through users' online calendars it tallies how much time can be devoted to idleness during a week. The application also allows users to schedule where they want to potter and to specify exactly what

or set periods so that it is largely defined by when it isn't done rather than when it is. In effect, pottering-time takes on a marginal status where it continually falls to the periphery of some other sense of time.

As a sketch, the Pottering Manager (Fig.4) offers a provocative position from which to reflect on this distinctive quality of pottering-time. Immediately unsettling in the sketch is the rendering of a homogeneity of time. Not only does the Manager conflate work and personal time, it also represents time as something simply divided into equivalent and interchangeable units.

Less pronounced, but possibly more illuminating is the way in which the Pottering Manager succeeds to juxtapose calendar-time and pottering-time. There is an immediate uneasiness with the desktop calendar that calculates free-time and then assumes one might want to inscribe, in advance, what to do with it. Calendars enable us to manage our time in some consistent fashion so that we can arrange meetings, remember birthdays, etc. In short, the calendar ensures we are accountable to some normative measure of time so that we can arrange our own schedules against those of others. The Pottering Manager is 'broken', because the collective sense of time embodied in the calendar is fundamentally at odds with the temporal rhythms bounded by pottering-time. The short engagement with one thing and then the movement on to another that characterize our informants' potterings, indicates that time can pass along individual trajectories and rhythms and not in coordination with the carved out, linear rendering of collective calendar-time. The point to emphasise here is that time is deeply bound to particular ways of being, so that its reckoning and passing is constituted in and through experience.

Accountability

As we've suggested, pottering is made up of those things we find hard to account for. Its slipperiness as well as the way it is regularly referred to in negative terms seems to attest to this. We want to take this idea further by suggesting that it is, in part at least, our sense of availability and thus accountability to others that makes our experiences of time and space distinct when pottering.

In our fieldwork, one of the ways pottering was regularly defined was to contrast it with activities done for others (childcare, work, bill-paying, etc.). An informant, Mary, explains she is disrupted from pottering when she has to do something for someone else, when the phone rings, or when people want time from her. Indeed, pottering dissolves into something else when it becomes purposeful for others. Jamie, another informant, captures both the difficulty in articulating what it is to potter and also this sense of doing something for oneself in one's own time:

If I've got some stuff to do in the greenhouse I will just go and do it. You know I'll have enough time cleared that it doesn't matter what time I stop… Usually there is just me there so it is quiet, everything I do I do for myself, not somebody else. It's quite hard to pin down exactly why it is relaxing, but it is. I guess the peace and quiet is the most important thing.…

What we want to suggest is that there is some notion of accountability that weaves through Jamie's ideas of where and when he potters. It is as though he clears particular times and spaces of accountability.

Buzz-off (Fig. 5) is a sketch designed to reflect on this notion. It sets the potterer outside of his or her every-

Fig. 5 Buzz-off.
"Buzz-off" is a device that allows users to control what sounds they hear when they potter. Specifically, it blocks any digital sounds, like telephones ringing, alarms sounding, or electronic reminders.

day demands. Interesting in the sketch is that it gives us insight into what it means to be on the margins of time and space. In reflecting on Buzz-off, we find the margins are defined not so much by absolute measures of space or time. Rather, they are about being in a place and time where one is by themselves, not answerable to news, alarms, incoming-calls, etc. Pottering is on the margins of not only the physical and temporal geography of the home, but also to some notion of being accountable to others. In pottering, then, we find times and spaces where one can place themselves beyond availability and their usual accountabilities to others, where time (and space) might be used or even squandered in one's own terms.

Conclusions

In conclusion, we briefly return to the two main themes of this paper. First, we want to touch on our experiences of integrating sketching with the analytical stages of fieldwork. This use of sketching was stumbled into almost by necessity. We discovered one of pottering's distinctive features—it being hard to account for—made it a difficult topic to examine. The sketching emerged as a catalyst for dialogues between the study's sociologist and designer, providing a concrete resource to unravel specific lines of interpretive inquiry. We are conscious that we have only reported, here, on the use of the sketches as resources in our own discussion and analysis. In future work, we plan to see how our sketches might be used to engage participants, providing them with an opportunity to elaborate on their ideas. We see this as a promising way to enrich or 'thicken' our empirical descriptions.

Turning to our second theme, let us consider our study's consequences for design. Our investigations

confirm there are close ties between time, space and accountability. Crucially, they reveal that time and space can be seen as products of our participation in the world, and that they are in some cases shaped by how we manage our levels of accountability. It is not simply then that accountability can be surmised from one's place in time and space; the three continually interleave. This idea offers pause for thought when set against prevailing models in HCI. In domestic technology research, the sensing of availability and context regularly relies on normative notions of time and space. On this basis, availability can be adequately represented using terms like "Do not disturb", "Busy", or "Available" that have clear utility in the discrete communication patterns of office or home-to-home communication. Our investigations of pottering, however, suggest that technology for the home demands a more nuanced understanding of how we situate ourselves in time and space. Specifically, by exploring the marginal character of pottering we find there are subtleties in how time and space are valued beyond mere utility. Turning our attention to that which is hard to account for, we thus see it as instructive—at the very least—for HCI to address the 'insignificant', 'unproductive' and yet deeply valuable margins of domestic life.

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