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# The Practice of Everyday Sustainability: the View from a Farmers' Market

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**Abstract**

Much HCI research has been devoted to encouraging sustainable decisions, but only recently have researchers begun to engage with how users define sustainability. This study explores the definition of sustainability, and its relation to other concerns, among visitors to a farmers' market. Using cultural probes, we are exploring not only how people define sustainability, but also how the constitute, enact, and practice it in everyday life.

**Keywords**

Sustainability, practice, design, farmers' market

**ACM Classification Keywords**

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

**Introduction**

The last few years have seen a massive influx of HCI research about using computational and information technologies toward the goal of environmental sustainability [6,8]. A significant portion of this research focuses on designing technologies that support, encourage, or persuade users to behave in an environmentally sustainable manner. However, "what constitutes 'sustainable behavior' is usually determined by the designers" [6:1977] rather than by the users of such technologies. That is, with a few exceptions [e.g.,

14,15], there has been relatively little engagement with what users, or potential users, mean when they talk about sustainability, how they define sustainability<sup>1</sup>, how they see (or do not see) their various activities as enacting (un)sustainability, or the interconnections between sustainability and various other concerns. To explore these issues, we are conducting a design-oriented study of sustainability-related practices and attitudes at a local farmers' market.

### **Practice and Consumption**

For conceptual framing, this project draws on de Certeau's [5] examination of the quotidian practices by which people construct their daily lives. In particular, we draw on his description of the relationships between consumption and production.

de Certeau is concerned, among other things, with the cultural practices of consumption, e.g., watching television or reading. He argues that such activities on not merely passive consumption, but rather that they are active processes of production, not just of "making" but of "making do" with the materials and systems that one has available. Reading is, in part, a powers struggle, an act of subversion that rearranges and repurposes the existing hierarchies and structures of meanings. Thus, this line of reasoning applies not only to the reading of written texts, de Certeau argues, but also to many diverse activities that can be seen as practices of reading. "For example, one 'reads' a landscape the way one reads a text" [5:170]. Just as the idea of a text can be expanded to include various sorts of practices, viewing reading as production can

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<sup>1</sup> Indeed, despite the massive increase in interest and work in the area, there has been little discussion of what "sustainable" means in "sustainable HCI" [6,12].

also be expanded to show the active role of the supposed consumer.

This framing is particularly apt here, for two reasons. First, it complicates the relationships between production and consumption. How does the socioeconomic consumptive act of buying goods from a farmers market simultaneously constitute an act of creating a sustainable society of culture? Second, de Certeau explicitly includes in his analysis not only cultural consumption but also physical consumption, i.e., eating, referring to, for example, the "tactics of cooking," the ways in which making food also constitutes a form of cultural (re)making. That is, in the physical/cultural act of eating/consuming, what are we also making/producing?

### **The Farmers' Market**

Local farmers' markets represent a ripe opportunity for investigating practices of sustainability in the everyday. Much recent attention has been directed toward buying locally, to reducing harmful emissions that result from the transportation of goods by purchasing good closer to the their point of origin. While not always an option for every type of product, locally grown food is a viable alternative for many to mass produced or processed foods. One common means of buying and selling locally grown produce is through farmers' markets, periodic collections of stands where farmers come to sell their crops directly to consumers. Previous work in anthropology, social sciences, and marketing and business research have examined the cultures and practices of farmers markets and how the integrate with the existing community [1,4,9-11,13].

The farmers' market represents a rich site of research in part because it is a nexus of many complex and interconnected interests [1,11]. It is a source of healthy, nutritious, fresh produce; it serves as a means of investing in the local economy; it supports organic and environmentally sensitive farming practices; it can provide social and emotional connections with farmers and merchants; it is a site of social interaction with community and with family, it is a scene; it gives people a real, actionable way to feel that they are doing something that helps the environment, something sustainable.

However, some of these concerns can, at times, be at odds with one another. For example, organic farming requires replacing chemical fertilizers and pesticides with naturally-derived substitutes, substitutes that are often less effective. This decreased effectiveness means that yields will not be as high; farmers will lose more crops to the weeds and pests that chemicals would have eliminated. Done on a large scale, it is unclear whether or not organic farming practices would be sustainable, in the sense that they might not provide enough food to feed the number of people who need to be fed. As another example, consider the economics of the farmers market. Despite the fact that farmers' markets are direct sales from producers to consumers, the produce at many such markets costs just as much as, if not more than, produce bought in a conventional grocery store or supermarket. I may be an environmentally-minded individual, but I also have finite monetary resources. How do I decide when expensive produce at the market is worth it? We want to understand how these various, interconnected

concerns are negotiated in visitors' experiences of the market<sup>2</sup>.

### **Community Probes**

How should one study the interrelations between such complex concerns? This study is employing cultural probes [7], for two reasons. First, we want to understand how visitors to the farmers market interpret sustainability and its relationship to other aspects of the market. Cultural probes are often designed to explore study participants' interpretations of prompts and activities, making it useful in exploring how participants negotiate their enactments, their readings, of sustainability. Second, cultural probes are design oriented. One goal of this research is to explore the ways in which there may be opportunities for technology design, as well as places in which technological interviews may be less appropriate [cf. 2].

Our current study revolves around a one-week series of diary activities. Participants are given a diary with one page for each day of the week, where each page describes an activity they are to complete. For example, on one day, they are asked about their most recent trip to the market: what they bought, with whom they went, if there was anything they wanted but did not get. Another day asks how much of their income they spend on food and how much of that is spend at the farmers' market. A third asks them about their favorite meal that week: what it was, when and with whom they ate it, and whether it included anything from the market. Each page of the diary is designed to reflect the task, e.g., the page for the favorite meal is

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<sup>2</sup> Certainly, farmers and merchants at the market also have similar complex sets of interconnected concerns. For the time being, this study is focused on visitors to the market.

made to look like a table with a placemat. This current study is partly a pilot, to gain a sense for how participants interpret the probes. We are planning a future study that incorporates a large variety of activities.

Furthermore, we are expanding slightly the cultural probes methodology. The probes were originally intended as a means of fostering a conversation between designers and members of a community [3,7]. We are exploring how probe activities can be used to foster discussion among community members. For example, one common cultural probes task is to give participants a camera<sup>3</sup> and ask them to take pictures of things, e.g., "your home," "the first person you see today," "something desirable" [7:23]. We then plan to take those pictures, display them in a public space at the market, and elicit visitors' responses to them. Perhaps what one person sees as "something desirable" another will see as "something ugly." Perhaps what one person sees as "waste" another will see as "sustainability." By allowing visitors to comment on the photos, we seek to foster (hopefully) provocative conversations among community members.

This study is currently focused on studying the practice of everyday sustainability. One of our future goals is to help enable the design of everyday sustainability [cf. 14]. How can technology (or perhaps a lack thereof) help people to design their everyday lives in a more environmentally sustainable manner, along the way

<sup>3</sup> Since this study is about sustainability, we believe there is a slight tension in the common cultural probes approach of providing study participants with a repurposed disposable camera. At the time of writing, we are considering the use of custom-made pinhole cameras from repurposed household waste (e.g., oatmeal containers or tin cans).

encouraging them to reflect on how they define and enact sustainability everyday life?

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