Chapter 6

Information Grounds: Theoretical Basis and Empirical Findings on Information Flow in Social Settings¹

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1. INTRODUCTION

Do you go to a place for a particular reason but wind up sharing information just because other people are there and you start talking? If so, then you are likely participating in an information ground. In this chapter, we discuss how the social atmosphere of such venues as health clinics, beauty and tattoo parlors, bike shops, and sport events can foster information sharing in spontaneous, serendipitous, and planned ways. Moreover, we explain how information ground is a novel and timely framework for studying information behavior in rich and holistic ways, along with results up-to-date from current research.

At face value, the notion of information grounds may appear intuitive and obvious; however, its formal identification as a theoretical notion in the late 1990s fit with other developments in the field of information behavior. Historically, research on information behavior primarily focused on individuals’ use of information sources and their sociodemographic characteristics—examinations which Zweizig and Dervin (1977) explained as “use and user studies”. These studies, which addressed such questions as “how often is the X system used and by whom?” explained little about the reasons that people engage in information seeking and to what, if any, effect. Research in the early 1980s signaled a breakthrough. Marking the user-centered paradigm (Dervin & Nilan, 1986), several frameworks emerged, such as Dervin’s Sense-Making (1992) and Belkin’s Anomalous States of Knowledge (Belkin, 2005; Belkin, Oddy, & Brooks, 1982), that focused primarily on the how and why of uses that people make of information systems and cast users in the forefront with emphasis on understanding contextual aspects of the user’s situation (Dervin, 1992).

In the 1990s, this research direction was cemented with the biannual, European “Information Seeking in Context” (ISIC) conference series, which pushed researchers to fully consider the holistic impact of context on information behavior. Indeed, two of the most cogent articulations on the nature of context were presented at ISIC by Dervin (1997) and later Kuhlthau (1999). It was this move, together with the proliferation of ethnographic or qualitative methodologies (with its own inherent focus on holistic examination), the

¹This chapter expands greatly on an overview of information grounds by Fisher (2005).

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advent of using a social constructionist approach (Tuominen & Savolainen, 1997), and a renewed focus on information behavior and everyday life\(^2\) that led to the identification of information grounds.

Before launching our discussion of information grounds research, we wish to acknowledge that the notion of “place” as a research phenomenon is hardly new to scholars in such fields as sociology, anthropology, and geography—especially human geography. For his history dissertation, for example, Relph (1976) explored the nature of place from varied perspectives and highlighted the 1960s work of geographer Fred Lukermann, who characterized “place” as where:

1. Location is fundamental.
2. Nature and culture are involved.
3. Spaces are unique but interconnected and part of a framework of circulation.
4. Spaces are localized.
5. Spaces are emerging or becoming, and have a historical component.
6. Have meaning.

More recently, the monograph *Senses of Place* edited by Feld and Basso (1996) contains ethnographies of what “place” means to such different populations as the Apache of Arizona and the Kaluli people of New Guinea in terms of expressing and knowing. Lippard (1997) in *Lure of the Local: Senses of Place in a Multicentered Society* similarly discusses “place” by blending history, geography, cultural/social studies, and contemporary art. One of the most recent treatises on “place” was published in 2004 by Creswell, a professor of social and cultural geography at the University of Wales. Penned *Place: A Short Introduction*, Creswell colorfully discusses the many dimensions of “place” and explains the difficulties with trying to establish any one universal definition as he explores numerous examples using varied contexts.

The most significant work on place, however, is likely the widely popularized book by Oldenburg (1999, originally published in 1989) entitled *The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community* that launched the term “The third place” and the respective names of many community-oriented businesses, including “Third Place Books” in downtown Seattle. As its title suggests, Oldenburg asserts that some public places such as coffee shops and hair salons operate as our “third place”, meaning it is where one can be found when one is not at home or at work. A veritable social good (and necessity), Oldenburg provides numerous examples of these third places (which he continues as a series of case studies in his edited 2002 book) and conceptualizes on their nature. To be successful and attract people, he argues, as a neighborhood locale a third place must exhibit eight characteristics:

\(^2\) Historically, most studies of information behavior have focused on such elite populations as scientists and engineers, especially as it was these populations for whom the majority of information systems were designed. In the 1960s and 1970s, several landmark studies were conducted on how people seek everyday information. Their approaches, however, involved large-scale surveys that were problematic for several reasons, including expense (Fisher et al., 2005). After a long hiatus during the late 1970 and 1980s, researchers again began focusing on everyday folks but also began drawing upon qualitative methods.
1. Occur on neutral ground where "individuals may come and go as they please, in which none are required to play host, and in which all feel at home and comfortable" (Oldenburg, 1999, p. 22);

2. Be a leveler, meaning it is an inclusive place that is "accessible to the general public and does not set formal criteria of membership and exclusion" and therefore promotes the broadening of social networks where people interact with others who do not comprise their nearest and dearest (p. 24);

3. Have conversation as the main activity—as Oldenburg explains, "nothing more clearly indicates a third place than that the talk is good; that it is lively, scintillating, colorful, and engaging" (p. 26), moreover, "it is more spirited than elsewhere, less inhibited, and more eagerly pursued" (p. 29);

4. Be accessible and accommodating: the best third places are those to which one may go alone at most anytime and be assured of finding an acquaintance;

5. Have "regulars" or "fellow customers" as it is these, not the "seating capacity, variety of beverages served, and availability of parking, prices, or other features" that draw people in, "who feel at home in a place and set the tone of conviviality" while nurturing trust with newcomers (pp. 33–35);

6. Keeps a low profile as a physical structure, meaning it is "typically plain", unimpressive looking from the outside and not elegant, which "serves to discourage pretension among those gather there" and meld into its customers' daily routine (p. 37);

7. Has a persistent playful, playground sort of mood: As Oldenburg explains, "those who would keep a conversation serious for more than a minute are almost certainly doomed to failure. Every topic and speaker is a potential trapeze for the exercise and display of wit" (p. 37);

8. Is a home away from home, the place where people can be likely found when not at home or at work, "though a radically different kind of setting from home, the third place is remarkably similar to a good home in the psychological comfort and support that it extends" (p. 42).

In the remainder of his 1999 edition, Oldenburg describes other aspects of third places such as their personal benefits, which include novelty, perspective, spiritual tonic, and friendship; societal good in terms of their political role, habit of association, role as an agency for control and force for good, recreational spirit, and importance "in securing the public domain for the use and enjoyment of decent people" (p. 83). After exploring the nature of several third place examples in-depth, Oldenburg addresses the negative or downside of third places such as segregation, isolation, and hostility.

The notion of "place" also has not been ignored within the field of library and information science (LIS). While researchers such as Leckie and Hopkins (2002)—who drew upon Oldenburg's third place framework to study public libraries in Toronto and Vancouver, Shill and Tonner (2003) and Wiegand (2003) recently addressed the notion of "library as place", a continuing extensive examination is culminating as a special issue of the journal The Library Quarterly in 2006. But perhaps the most significantly-related work from LIS was conducted by Elfreda Chatman, who borrowed the concept of "small worlds" throughout many of her renowned ethnographic studies involving everyday life and marginalized populations.
While Chatman tended to analytically leave the physical setting in the background and focus more on the people present, she nonetheless always considered “place” as an intrinsic part of context and discussed its impact on her population’s information behavior. For Chatman (2000), who borrows largely from Shutz and Luckmann (1974) and Kochen (1989), a small world is a “world in which everyday happenings occur with some predictability” and “allows for the presence of ‘legitimized others’” by this meaning “people who share physical and/or conceptual space within a common landscape of cultural meaning.” As Chatman (2000) further explains:

Within the conceptualized understanding of information behaviours, the legitimized others place narrow boundaries around the possibilities of these behaviors. In other words, legitimized others shape, change, or modify the information that enters a small world in light of a world view. In this instance, a world view is that collective sense that one has a reasonable hold on everyday reality” (p. 3)

Four concepts that Chatman considers central to understanding small worlds are social norms, world view, social types and, of course, information behavior (Chatman, 2000; Pendleton and Chatman, 1998)—all of course which might be fruitfully observed while studying information grounds.

In the remainder of this chapter, we explore the nature of information grounds by discussing the results from several studies, starting with the initial exploration at foot clinics in Canada.

2. A DAY AT THE CLINIC

Information grounds arose unexpectedly from Pettigrew’s (1998, 1999, 2000) fieldwork at community foot clinics on how nurses, the elderly, and other individuals share human services or everyday information. Using Granovetter’s (1973, 1982) strength of weak ties framework, she hypothesized that the nurses provided the seniors with everyday information that the seniors could not obtain from other network members but that they would not use the nurses’ information until first conferring with strong ties. This stance was investigated by observing 108 seniors as they received foot care from 24 nurses for incidents of everyday information sharing, and then conducting separate, follow-up interviews with 24 nurse-senior pairs or dyads. Consistent with the ethnographic approach—as described by Chatman (1992)—Pettigrew kept extensive field notes of all forms of information sharing at the clinic.

While she initially expected everyday information to flow in the direction of nurse → senior, she quickly learned that seniors were ripe sources of everyday information for the nurses themselves, that multiple persons participated in exchanges (e.g., several seniors and nurses), and that seniors shared information while waiting for treatment and afterwards. These observations led to new research questions about the role of the clinic itself as a physical and social setting that promoted information exchange. Moreover, she observed that information needs were rarely stated as direct requests, but instead emerged subtly as people shared their situations with one another and chit-chatted.

Just as seniors were sometimes observed employing specific, indirect strategies to obtain information, the nurses used distinct techniques to identify information needs
and to disseminate information—albeit sometimes unconsciously. In her field notes, Pettigrew also remarked on the significance of such physical factors as the availability of refreshments, comfortable furniture, treatment waiting times, and the illusion of privacy in some settings as affecting information flow. Further richness was contributed to the clinic setting by such social factors as the presence of different types of individuals, the special "caring, trusting" qualities that the seniors associated with the nurses, and the "event" nature of the clinic in that for many seniors the clinic was their only bi-monthly outing during the cold Canadian winter.

In her 1999 article, *Waiting for Chiropody*, Pettigrew thus argued that social settings contain varied sub-contexts, which can be viewed or studied from the perspectives of its different actors—in the foot clinic case being the nurses and the seniors—along with the nature of the physical environment itself and the event's inherent activities. Together, Pettigrew further asserted, these sub-contexts form a grand context and that it is through studying these elements both individually and collectively that one arrives at a deep understanding of the information-related phenomenon. Drawing upon Tuominen and Savolainen's (1997) social constructionist approach to studying information exchange which emphasizes the value of studying conversation as created events from different perspectives, she defined information grounds as synergistic "environment[s] temporarily created when people come together for a singular purpose but from whose behavior emerges a social atmosphere that fosters the spontaneous and serendipitous sharing of information" (1999, p. 811).

In the immediate years following her work on the foot clinics, Pettigrew turned her research focus to how people use the Internet to seek everyday information (Pettigrew, Durrance, & Unruh, 2002.). Information grounds, however, returned to the forefront, first due to attention it began receiving from other researchers and students. Little other work had paid deep attention to the nature and impact of social settings on information flow; instead, they were examined as a backdrop or another contextual factor to understanding the main actors as part of conducting egocentric research. Pettigrew had suggested that we move social settings to the forefront and study them holistically as an equal and motivating partner in the phenomenon of information exchange, that we study information flow as a by-product of social interaction.

To information professionals she challenged them to make social interaction a by-product of information flow and to turn information settings such as libraries into social scenes a la information grounds. As colleagues said that information grounds resonated with their professional and personal experiences, Pettigrew again began observing characteristics at a new research site—coping skills and literacy programs for new immigrants run by the Queens Borough Public Library (QBPL) in New York—that were similar to those recorded at the foot clinics. Further conceptual development was thus needed on the information ground concept.

### 3. SOME PROPOSITIONS FROM QUEENS, NEW YORK

While there are many different definitions of "theory", a commonly accepted version in the social sciences is "a statement or group of statements about how some part of the world works—frequently explaining relations among phenomena" (Vogt, 1993,
In this sense, the purpose of theory is to orient the researcher towards a research problem by helping to phrase research questions and isolate key concepts, to help him/her know how to approach a problem methodologically, and to assist in interpreting results (Pettigrew & McKechnie, 2001).

Moreover, it is a researcher’s responsibility to contribute to theory building by testing emergent concepts across different populations or studies and to use those results to build propositions that explain the theory in nuts and bolts for others—perhaps the most illustrative information behavior example of this exercise being Chatman (2000), who traced with exceedingly strong detail how her different theories of information behavior were both grounded in empirical fieldwork and other conceptual frames such that they emerged naturally as part of theory development.³

Drawing upon findings from the foot clinic, Fisher (formerly “Pettigrew”) described information grounds in Fisher, Durrance, and Hinton (2004) as comprising seven key concepts—as seen in Figure 1—and they derived the following propositional statements:

Proposition 1: Information grounds can occur anywhere, in any type of temporal setting and are predicated on the presence of individuals.

Proposition 2: People gather at information grounds for a primary, instrumental purpose other than information sharing.

Proposition 3: Information grounds are attended by different social types, most if not all of whom play expected and important, albeit different roles in information flow.

Proposition 4: Social interaction is a primary activity at information grounds such that information flow is a by-product.

³The monograph Theories of Information Behavior edited by Karen E. Fisher and colleagues (2005) was inspired by and thus dedicated to the late Elfreda Chatman. It contains overviews of 75 theories written by 85 authors worldwide, and its introductory chapters were written by Marcia J. Bates, Brenda Dervin, and T. D. Wilson.
Proposition 5: People engage in formal and informal information sharing, and information flow occurs in many directions.

Proposition 6: People use information obtained at information grounds in alternative ways, and benefit along physical, social, affective, and cognitive dimensions.

Proposition 7: Many sub-contexts exist within an information ground and are based on people's perspectives and physical factors; together these sub-contexts form a grand context.

These propositions were tested in a field study of how new immigrants in Queens, New York, use coping skills and literacy programs run by QBPL at different non-library building locales in Queens, New York. From interviews and observations with 45 program users, staff, and other stakeholders at two different field sites, they derived a grand context (in Pettigrew's (1999) terms) woven from three sub-contexts: the immigrants of Queens, NY; the QBPL, its service model and activities for immigrants; and professional contributions of QBPL staff. Similar to Pettigrew's findings regarding foot clinics, they concluded that the QBPL sites were information grounds and that they supported the derived propositions. For example, the information grounds occurred wherever the QBPL held its programming regardless of type of building or whether the QBPL was featured predominantly.

People gathered at the locales for the express purpose of increasing their literacy or coping skills; not primarily information sharing although the latter was indeed a by-product. They learned that the different actors—from the frontline and behind-the-scenes QBPL staff to the range of users, from the newly immigrated to the more established—played different roles in the information-sharing process, where QBPL staff acted in roles of subject or cognitive authority similar to Pettigrew's (1999, 2000) nurses but also were recipients of everyday information gleaned from the program participants themselves. Because of the hodgepodge of people present and the pressing needs of the clientele for everyday information in general, as they adjusted to life in a new country and spoke in a new language in which they held varied levels of fluency, it quickly became obvious that people shared information in multiple directions often as part of social interaction and that topics of information could arise both quite serendipitously as well as through framing via the programs' subjects.

Fisher, Durrance, and Hinton (2004) further learned that QBPL staff engaged considerable effort in nurturing these information grounds for their immigrant clients by heavily promoting the programs outside the QBPL confines and connecting with local community-based organizations and opinion leaders, making special effort to ensure that people felt welcome, comfortable, and safe (i.e., no one was going to report anyone for anything, such as to Immigration Services) including through employing multilingual staff and preparing materials in varied languages, and hosting frequent ethnic programs that celebrated cultures from around the world.

The extent to which the QBPL customers benefited along multiple dimensions from the literacy and coping skills programs was well illustrated by the repeated finding that users had learned of QBPL prior to ever reaching the shores of the U.S.; in their home countries as they prepared to leave, future customers learned by word of mouth that they should go to the QBPL for help once they arrived in New York. In addition to learning
to speak and read English, they would learn valuable information about getting by in their new country and all in a relaxed atmosphere surrounded by people who understood their situation if not experiencing something similar and who could likely speak their language.

Thus, in terms of outcomes or benefits to the immigrant users, Fisher, Durrance, and Hinton (2004) reported that the information grounds facilitated two types, which they labeled (1) building blocks towards information literacy and (2) personal gains achieved by immigrants for themselves and their families. We further summarized that “successful introduction to the QBPL—as per its mission, programming, and staff—can lead immigrants to a synergistic information ground that can help in meeting broad psychological, social, and practical needs” (Fisher, Durrance, & Hinton, 2004, p. 754). Commenting on the settings’ multiplier effect, we noted that the immigrants benefit in broad, unexpected ways from participating in the coping skills and literacy programs, and that the programs’ social and physical setting along with the QBPL staff play major contributing roles.

4. EMPIRICAL TESTING FALL 2003

The results from the two in-depth qualitative studies of foot clinic and QBPL programs prompted the need for further empirical testing of the information ground framework but this time with a large population. Research was needed using an open-ended approach that solicited data specifically about people’s information grounds and what made them viable.

Two studies were deployed during fall 2003 and were guided by the same three research questions:

1. What are people’s information grounds?
2. What characteristics make an information ground opportune for acquiring information?
3. What types of information do people obtain at information grounds?

The first study (Fisher et al., 2005) was conducted in partnership with the United Way of King County, a large non-profit organization that receives public funding and allocates it to different community organizations. As part of its operations, the United Way conducts periodic assessments of the public’s needs for health and human services. In return for assisting with designing the survey instrument, Fisher and colleagues were permitted to include a set of questions about residents’ information grounds.

As explained in-depth in Fisher et al. (2005), this study used sample clustering by zip code to survey 612 residents of East King County in Washington State (a large urban/rural area) by telephone. Calls lasted on average 32 min. The 612 respondents, who were largely female (63%), white (84%), well-educated, and earning above the poverty line, were asked the following questions:

1. Sometimes people go to a place for a particular reason such as to eat, get a haircut, to worship, for child care, get something repaired, make crafts, see a health provider or get exercise, but end up sharing information just because other
people are there and you start talking. Does such a place come to mind for you? What is it?

2. What are some examples of information that you might pick up there?

3. What makes this a good place for obtaining information, either accidentally or on purpose?

For each of these open questions, the United Way contracted callers were instructed to record the respondents’ answers using the respondents’ own words.

The second study used the same questions but employed a slightly different methodology: instead of contacting people by telephone, 38 distance masters students at the University of Washington approached 276 individuals in varied public settings in the Northwest, Utah, California, and Washington, DC. These public settings ranged from urban streetscapes to coffee houses to public transport. The findings from both studies were remarkably similar.

While a main theme was that people were looking for “mingeable” places—in the words of one respondent, Fisher et al. (2005) reported that the two most popular information grounds were places of worship and the workplace, followed by activity groups (e.g., clubs, teams, playgrounds, fitness clubs), personal services (e.g., hair salons, tattoo parlors, barber shops), and restaurants/bars. More unusual information grounds included a needle exchange program, the local dump where people forage on weekends, military training venues and Oprah.com. A key distinction emerged regarding one’s motivation for being at an information ground, meaning Fisher and colleagues classified settings in which one has little choice but to be present as “hostage phenomena”, these sites included waiting rooms at auto repair shops; medical and dental offices; grocery store queues; laundromats; ferries, buses, and trains; and luggage carousels at airports.

In answer to Question #2 “What are some examples of information that you might pick up there”, both studies identified a broad range of topics ranging from news and current events to hobbies and travel, everyday advice, entertainment, goods and services, healthcare, work related, education, and spirituality to finances, government services, and what other people are doing. Responses to question #3 “What makes this a good place for obtaining information, either accidentally or on purpose?” revealed that information grounds facilitate “desirous mingling” because they focus on the people present, provide opportunity for people to bond and share common interests and needs, and you feel like other people understand you and you trust them. Information grounds were also valued because of their diversity (range of different people), and because one could receive encouragement in dealing with something and gain interpersonal skills. As Fisher and colleagues concluded, people value their information grounds because they emphasize the social nature of information exchange and go beyond direct fulfillment of an information need.

A third study was further conducted during fall 2003 and winter 2004 that employed the same set research questions and same instrument (that also comprised other questions). The population, however, was very different. Instead of asking members of the general public about their information grounds, Fisher et al. (2004) conducted in-person interviews with 51 migrant Hispanic farm workers and their families in Yakima Valley, Washington—a large agricultural capital. The combined transitory nature of their work
along with low wages, education, healthcare, and other factors contributes to Hispanic
farm workers’ label as information poor: meaning they have little success in meeting
substantial needs for information.

Fisher et al.’s (2004) study of farm workers and their families comprised interviews
and observation with 60 individuals at community technology centers, one of which was
held in an old community building that also housed the long-standing Hispanic radio
station. This farm working population was considered special because of their “at risk”
nature (suspicion, illegal aliens, etc.), and four of the researchers were fluent in Spanish,
one was Mexican-born and one was from the Yakima area—all coached in matters of
cultural awareness and sensitivity.

The 51 participants were male (57%) and female (43%), young (mostly between the
age of 17 and 30), and from large households (up to 11 people). The most popular infor-
mation grounds were church, school, and the workplace; other sites included the farm
workers’ medical clinic, hair salons, garages, and the Hispanic radio station premises.
Food-oriented locales were noticeably absent. Participants valued information grounds
because they interacted face-to-face with people whom they regarded as trustworthy
and reliable. Information topics ranged from family issues, employment, and legal help to
gossip and current events.

Information grounds also facilitated the phenomenon of interpersonal berrypicking.
A spin-off of Bates’ (2005) berrypicking theory that typically involves how users conduct
online searches a bit at a time such that they evolve iteratively, interpersonal berrypicking
implies that a person, in this case a Hispanic farm worker, uses information grounds to
meet new social contacts or nurture existing ones in the aim of bettering his/her access
to new information.

While the three field studies conducted in fall 2003 yielded valuable insights into
the nature of information grounds, many new questions arose for study. As Fisher et al.
(2005) wrote:

The notion of IGs may be only newly proposed in the literature, but the phenomenon
itself is not new, only its identification. Linked strongly with people’s natural incli-
nation of constructing and sharing information interpersonally and thus socially,
IGs have been around since time immemorial and yet, little research—at least
from an IB perspective—has explored their nature http://InformationR.net/ir/10-2/
paper223.html.

More insights were needed into the people at information grounds, how these people
are connected, what they do when visit their information grounds, and what they like
about them.

5. EMPIRICAL TESTING FALL 2004—THE COLLEGE STUDENTS

In fall 2004, Fisher and Naumer began a field study that focused on deriving an
information ground typology that captured such nuances as:

- focal activities;
- actor/social type roles;
• effects of information type (trivial vs. big decision information; insider vs. outsider);
• motivation (voluntary vs. forced or hostage, example, choir groups vs. waiting rooms);
• membership size and type ("open" vs. "closed").

By far the most exhaustive and interesting information ground study-to-date, this study examined college students at the University of Washington. Located on a large campus in the north-central area of Seattle, the University of Washington’s 45,000 undergraduates and graduate student base are primarily Caucasian. Regarding the 30,000 undergraduates just half of whom are female (52%), 87% are state residents, and 68% are Caucasian followed by Asian American (24%); Latino (4%), African American (3%) and Native American (1%).

The survey, which comprised 27 primarily open questions, was conducted in late October 2004, a few weeks after the fall quarter had begun. Of the 729 students surveyed, 55% were female and 45% were male. Approximately 72% were undergraduates, 21% were graduate students, and 7% were non-degree seeking students. The mean age was 23.6 years old and the mean period of time as a University of Washington student was approximately 2 years.

The most common information ground identified was coded as "campus". Expressed by half the respondents, "campus" was defined as classroom spaces, in the hallways before and after class, study centers, studios (as in the Art and Architecture schools), rehearsal area (for the Band and Drama departments), Red Square—one of the main large outdoor gathering areas, and student lounges. Note, “campus” did not include the Husky Union Building, known as the “HUB”, which contains varied restaurants, recreational venues, and other services. Instead, HUB-type responses were coded in terms of the specific internal, HUB place that a respondent described. Thus, if someone said a hair salon at the HUB was his/her information ground, then the response was coded as "hair salon".

After "campus", the most common information grounds identified were restaurants and coffee shops, workplaces, and social gatherings. Approximately 33% of respondents identified these as one of their information grounds. However, when asked at which information ground they encounter the best information, roughly 42% of respondents indicated a restaurant or coffee shop whereas only 14% indicated campus. Social gatherings and the workplace were each considered to be the best place by approximately 30% and 23% of the respondents, respectively. In contrast to the information ground studies discussed earlier, "church" as a primary information ground was noticeably absent.

Moreover and surprisingly for the college student population, only about 3% considered online sources to be an information ground, which was startling since 63% earlier told us that they invariably turn to online source as their first choice when seeking everyday information and only 26.5% indicated a preference for seeking information from strong or close interpersonal ties (under the research heading of “information habits”, the United Way telephone study and in-person survey in fall 2003 revealed that 39.9% prefer getting their information from strong interpersonal ties while 39.2% turn to the Internet). Considering that the college population surveyed is most likely to be relatively
technically savvy and have access to the technology that would allow them to access online sources, this finding suggests that places that include opportunities for face-to-face interaction may be more desirable for some populations.

In answer to "why the places they choose were the most important or best place to encounter information", respondents' replies were coded along three main categories: information-related, people-related, and place-related. In terms of being information-related, almost 50% of the respondents talked about the quality of information encountered at these places. The most common characteristic mentioned was the relevance, meaningfulness, or usefulness of the information encountered. Another common characteristic mentioned was the quality or comprehensiveness of the information.

Other answers referred to the interesting nature of information, the reliability of information, unanticipated information, and the abundance and accessibility of the information. About 25% of college students indicated a particular information grounds was best because of a reason that involved interaction people. Common reasons included both the presence of people representing diversity of opinion as well as the other extreme in which people held the same beliefs and opinions as the respondent. Other people qualities were helpfulness, trustworthiness, and shared interests. Finally, over 25% of respondents indicated that a characteristic of the place visited was what made their information grounds important. The most common reasons had to do with a place being familiar or comfortable. Many respondents indicated that the convenience of the place was also an important factor.

In terms of the people in attendance, almost half of the respondents said that they knew most of the people at their information ground well and over 40% indicated that they either recognized them but did not know their names or knew their first names. Only about 10% indicated that they would not recognize the people at their information ground. When asked if they interact with any of these same people in other settings over 75% of indicated that they did indeed, indicating that that the information grounds of college students comprise fairly strong, multiplex ties. When asked how often they frequented the information ground at which they receive the most important or best information, 50% indicated they visit it daily and 40% answered weekly—meaning 90% are frequent, regular visitors of their information grounds.

Over 70% of respondents also indicated that they had been going to their place for over a year. This finding may support the theory that people follow habitual patterns in seeking information and that information grounds may be an important aspect to people's information seeking habits. This finding would support principles of everyday information seeking proposed by Harris and Dewdney (1994) in their book "Barriers to Information: How Formal Help Systems Fail Battered Women", specifically their sixth principle (p. 27), that "people follow habitual patterns in seeking information"—meaning people tend to adhere to deeply engrained patterns or habits when seeking information much the same as they do when carrying out other routine tasks, such as driving to work.

College students' responses when asked what they have in common with the people at their information grounds were divided into four categories: activity, background, characteristic, and interests. The activity category indicated that the respondent shared a common activity with the other people in a way that involved interaction such as rock climbing or taking the bus. Many people identified a common employer or the fact that
they all attended school as the element that created a background commonality. This type of response was coded as the respondent speaking to a common background which could entail a common employer, school, neighborhood, education level, or income level.

Therefore, background represented identity based on shared circumstances rather than direct interaction and shared experiences. The third category of response focused on characteristics that could be physical, mental, or emotional. For example, many respondents indicated that they were all of the same gender, same age, or that they were all "stressed out". Finally, the most common response accounting for over 50% of respondents were common interests such as sports or Chinese cooking.

In contrast to the earlier question about what factors made a particular information ground the best for encountering important everyday information, we later asked the college students what they liked about their information grounds in general. Instead of focusing on information-related attributes, responses here dwelt around such place attributes as atmosphere and ambience: over 50% of respondents mentioned this as an important consideration. Other reasons—which were all mentioned by 11% or less of the respondents—included making connections with people, amenities, convenience, and resources. When the answers to this question were categorized according to whether they related to the information, people, or place Fisher and Naumer found that about 75% related to the physical location, whereas approximately 14% focused on people and only 6% addressed information. This suggests that physical, place-related factors play an extremely important role in the effectiveness of an information ground, at least in the case of college students.

Significantly we sought to identify what kinds of topics are encountered at students' information grounds. Several broad categories emerged from coding the open response data, including: events, information, knowledge, issues, opinion, and people. Most responses indicated that students encountered multiple types of information at their information grounds and could seldom be labeled exclusively under one category. The category of event information encompassed anything "about local or campus happenings like concerts and cultural events". Responses categorized as information referred to factual information such as "new technologies" or "computers". This category was different than the category of knowledge which referred to information that was interpreted. Responses coded as knowledge included "deeper philosophical knowledge" or "life lessons, advice."

There were also many responses directed at specific issues such as "presidential election" or "world events and issues." Another area included a desire for information that included the same or differing perspectives on information such as "personal experiences of others: foreign students in the United States, fresh perspectives" and "People's thoughts and opinions". Finally, numerous responses were concerned with information regarding people and were often concerned with the social aspects of information exchange. These responses often dealt with friends and family and included responses such as "How friends are doing today. How are friends' classes" and "Learning new things about what family members are doing."

When asked what percentage of the everyday information that they encountered at the information grounds occurred by chance, college students' responses were fairly uniform across quartiles (i.e., 25%, 50%, 75%, 100%). Slightly more respondents answering
that 50–75% of the information encountered were by accident or chance. Respondents indicated that information about events, opinions, and people was the types of information most likely to be encountered by accident or chance.

6. DISCUSSION

The above studies reveal that information grounds are an emergent and significant area for future study. While there are several parallels with research undertaken in cognate fields, especially examinations of “place” in fields such as human geography, and Oldenburg’s third place, as well as within LIS—most notably in terms of Chatman’s work on small worlds—much research remains to be undertaken. Regarding Oldenburg’s third places, work is needed on how information grounds are similar and dissimilar as there are many: some information grounds—for example—are hostage settings while others fail to meet several of the eight propositions that Oldenburg outlines. Regarding small worlds, as Chatman discusses them, we need to explore how particular information grounds are an element of the small world phenomenon and under which circumstances.

Research is also needed on how information needs are expressed and recognized at information grounds, and how information is socially constructed among different actors—phenomena for which the New Yorker’s financial page writer Surowiecki’s (2004) work The Wisdom of Crowds and his colleague Gladwell, author of the Tipping Point (2002) and most recently Blink (2005) may provide light in addition to the findings from basic research undertaken by academics such as Savolainen’s (1995) everyday life information seeking model. Yet research also needs to address how people’s perceptions and participation in information grounds change over time, the life cycles of information grounds (how they are created and sustained; what causes them to disappear or transform), and how they can be used to facilitate information flow.

How, for example, can employers alleviate the stressors of unemployment by helping laid-off employees establish or identify “replacement” information grounds that can facilitate the availability of information required during times of transition? How can healthcare providers utilize information grounds to help people and their caregivers as they progress through stages of illness or grief? In sum and pragmatically speaking, information grounds yield local and global impact because they occur across all levels of all societies, especially as people create and utilize them to perform tasks in the course of daily life. The better we understand where information grounds are situated for different populations as well as how they emerge and function, the better we can design ways of facilitating information flow therein.

As we continue analyzing the College Student data to flesh out the information ground typology and explore further the notion of information ground as place and its fit with small world theory and other frameworks, several other information ground studies are underway, which are summarized as follows. Readers interested in tracking our research on information grounds, collaborating on future studies or contributing an anecdotal information ground page to our Information Behavior in Everyday Contexts (IBEC) Website are invited to visit us at http://ibec.isschool.washington.edu.

Information Grounds during Baby Sleep Time (E. F. (Lynne) McKechnie, Associate Professor, and Pam McKenzie, Assistant Professor, Faculty of Information and Media
Ethnographic observation and interviewing was conducted by McKechnie and McKenzie (2004) at eleven, 30 min sessions of public library baby/adult caregiver story times to discover what actually happens at these sessions. One of the surprising results was that the adult caregivers engage in everyday life information sharing about topics such as parenting, health, child development, travel, and daycare. These findings suggest that story time programs, in addition to being important literacy events for the children participating, also act as information grounds or informal sites where information is shared. This study was funded by ALA's Carroll Preston Baber Research Grant award.

Information Grounds of Seattle's Polish Community (Tom Dobrowolsky, MLIS Student, The Information School, University of Washington): Seattle contains a small, though active, Polish-American community. Transcending any one neighborhood, this network comprises several social hubs, events, and gathering places in order to actively promote Polish culture and to connect Polish-Americans with their ethnic roots. In this ethnographic study, 15 members were interviewed and participant observation was conducted in three popular gathering places. Observations involved detailed descriptions of the events taking place, the places themselves, the people, and groups present, and the social phenomena which occurred in them. Findings revealed the participants' information grounds and how they were used to disseminate everyday information. Additionally, findings addressed how the social nature of information exchange, via information grounds, functioned to establish a sense of community and to maintain Polish ethnic identity within this geographically disparate social network.

The Virtual Jaamati: Technology to Facilitate Information Grounds at Coffee Shops (C.A. Burrell and Dev Nambi, Undergraduate Students, The Information School, University of Washington): The Virtual Jaamati project uses location-specific computing at such places as bars, libraries, and cafes to facilitate information sharing. The software enables patrons (using optional aliases) to connect to a wireless network using a personal computing device to gain access to services such as profiles, forums, announcement archives, photo galleries, and intra-grounds Instant Messaging. We are evaluating the information behavior people at coffee shop as they use the Virtual Jaamati software. Findings will reveal ways in which the software facilitates communication and interaction among users.

Seattle's Pike Place Market Study (Steve Lappenbusch, PhD Student, Department of Technical Communication, and University of Washington): Considered the soul of Seattle, the Pike Place Market by the waterfront has been continuously operating for nearly a century. The Market's traditions, products, and people make it a unique shopping destination and a thriving community. Open 7 days a week, the vendors at this covered, 9-acre, multiplex market range from sellers of fish, fruits, and vegetables to specialty items and clothing. With nine million visitors each year, the Market also engages local farmers, craftspeople, businesspeople, and performers in addition to providing a home to 500 residents, most of whom are low-income seniors, as well as a variety of services for the needy.

The research questions guiding the study of Pike Place include: (1) What kinds of information grounds emerge in the daily interactions of Market workers and customers? (2) What benefits do people report or anticipate from participating in these information grounds at the Pike Place Market? and (3) What roles do different people play in the flow...
of information in the Pike Place Market? Data are being collected through unobtrusive observation and in-depth interviews with different stakeholders, including Market staff, vendors, regular shoppers, and tourists.

Verbena: Overcoming Poverty as Part of the Information Ground Life Cycle (Kris Unsworth, PhD Student, The Information School, University of Washington): Verbena is a Seattle-based, non-profit health services, and advocacy organization that serves lesbian, bisexual and queer women, and transgendered individuals. This research focuses on the creation and staying power of an information ground, and addresses three key questions: How are information grounds created? How does an information ground change over time? and How is an information ground maintained? Implicit in these questions will be how the information ground, from initial creation through its maintenance and various transitions, provides a space for addressing the needs of its inhabitants or actors.

The provision of health services developed from the organization's initial purpose, which was to provide a support network for lesbian cancer survivors. This research will examine the development of this organization or information ground via its history and current services, including outreach. Stakeholders of interest include Verbena's organizers, board of directors, frontline staff, and clients. Since sexual minorities may face unique barriers to healthcare and may also be at a higher risk for health-related problems, it is reasonable to refer to some members of the population served by Verbena as the "information poor". Thus Chatman's (2000) information poverty framework for understanding the social life of specific groups will be used to add context to the needs of lesbian, bisexual and queer women, and transgendered individuals.

Information Grounds of Tweens (Karen Fisher, Associate Professor, and Colleagues, The Information School, University of Washington): Adolescents between the ages of 9 and 13, known as Tweens, may be considered "placeless" because society discourages them from hanging out in public venues and because they do not own their own space; moreover, they are considered information poor because their needs for everyday information that accompany their burgeoning psychological, social, and physical development are largely negotiated and translated by adults. In this National Science Foundation funded study, Fisher and colleagues are conducting focus groups and follow-up independent interviews with tweens from different socio-demographic areas in Seattle to learn about tweens' information grounds and what makes them unique from those places favored by adults. Emphasis is also placed on understanding the role of interpersonal communication among tweens.

Information Grounds of Stay-at-Home Mothers (Karen Fisher, Associate Professor, and Colleagues, The Information School, University of Washington): Stay-at-home moms played multifaceted roles such as caregiver, shopper, chauffeur, money manager, etc., that require a broad range of everyday information. Virtually nothing is known, at least from an information behavior perspective, about this population. In a National Science Foundation funded study, Karen Fisher and colleagues are conducting unobtrusive and participant observations of mothers as they interact with one another during parent–child activity and exercise programs. Additionally, they are asking mothers to keep diaries of their information-sharing incidents which are then discussed during periodic interviews with the researchers. In addition to exploring the nature of the information grounds of stay-at-home mothers, this study is focusing on the role of interpersonal communication.
References


Oldenburg, R. (2002). Celebrating the Third Place: Inspiring Stories About the “Great Good Places” at the Heart of Our Communities. NY: Marlowe.


