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# Small world and information grounds as contexts of information seeking and sharing

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#### ABSTRACT

This study compares and contrasts small world and information grounds as contexts of everyday information seeking and sharing. More specifically, the focus is on spatial and social factors constitutive of small world and information grounds. To this end, the main works written by Elfreda A. Chatman and Karen E. Fisher and their associates are scrutinized by means of an in-depth review of the literature of studies on small world and information grounds. Both approaches primarily discuss the spatial factors in terms of physical places. The construct of small world places more emphasis on spatial factors as constraints, while the construct of information grounds thematizes spatial factors as open arenas. As to social factors, the construct of small world focuses on normative constraints of information seeking and sharing. The construct of information grounds, in contrast, emphasizes the co-presence of other people as an opportunity to serendipitous seeking and sharing of information. Although Chatman and Fisher thematize the contextual factors differently, the constructs may also be seen as complementary.

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#### 1. Introduction

A detailed characterization of the contexts of information seeking and sharing is a challenging task. Dervin (1997, p. 13) once equated it with the "taming of an unruly beast." In recent years, numerous attempts have been made to characterize this beast, as evidenced by extensive review articles discussing the contextual factors of information behavior (Courtright, 2007; Pettigrew, Fidel, & Bruce, 2001; Solomon, 2002). On the other hand, these reviews suggest that so far there is a lack of studies scrutinizing the ways in which the contextual factors of information seeking and sharing have been specified in individual research approaches.

### 2. Problem statement

To bridge this gap, an attempt will be made to review the ways in which the contextual factors are elaborated in both the construct of *small world* proposed by Chatman and the construct of *information grounds* advocated by Fisher and her colleagues. More specifically, this review article addresses the following research questions:

- In which ways do the constructs of small world and information grounds specify the spatial and social factors constitutive of the context of everyday information seeking and sharing?
- How are the relationships between spatial and social factors characterized in the above constructs?

The above constructs were chosen for analysis for three major reasons. First, both represent major approaches to everyday informa-

\* Fax: +358 3 3551 6560. E-mail address: Reijo.Savolainen@uta.fi. tion seeking and sharing. Second, the above scholars have discussed the contextual factors of information seeking and sharing in detail. Third, the study of their approaches sheds light on the nature of contextual factors of information seeking and sharing more generally.

# 3. Literature review

Courtright (2007) provides a recent overview of the ways in which context is conceptualized in information behavior research. The topic of context appeared to be fairly amorphous and elusive; the terminology used by researchers is ambiguous (p. 276). There are many equivalents to context such as setting and situation (cf. Cool, 2001). In some cases, more specific equivalents are employed, for example, information use environment (Taylor, 1991). Interestingly, from the perspective of the present study, the equivalents also include concepts such as small world (Chatman, 1992) and information grounds (Fisher & Naumer, 2006).

Traditionally, context is conceptualized in terms of spatial and temporal factors that indicate where and when information seeking occurs (Savolainen, 2006b). Typically, such conceptualizations draw on the assumption that context is a kind of a time–space "container" where phenomena reside and activities take place, constrained by the boundaries of the context. The container model leads to the thought that context is a set of stable, delineated entities that can be conceptualized independently of the activities of their participants. Talja, Keso, and Pietiläinen (1999, pp. 752–753) labeled this approach objectified. Dervin (1997, pp. 14–15; 17–20) criticized such conceptions and suggested that context should be approached as something that changes over time; due to temporality, context is emergent and fluid. Context is not readily "out there" as a stable constraining entity; rather, context is constructed and reconstructed through human

action and interaction. Talja et al. (1999) associated this viewpoint with the interpretative approach, suggesting that context should be understood as a carrier of subjectively interpreted meaning. Context is not something that describes a stable setting; it is something that people do (Dourish, 2004, p. 6). In terms of ontology, context is something that is embedded in action and practices.

#### 3.1. Spatial factors

The metatheoretical approaches to context discussed above may be concretized by characterizing specific qualifiers of context such as spatial and temporal factors. Savolainen (2006a) identified three major ways to view spatial factors as contextual qualifiers of information seeking. First, the objectifying approach conceives of spatial factors as external and entity-like qualifiers that primarily constrain information seeking; this viewpoint draws on the metaphor of container discussed above. For example, the concept of information fields suggested by Johnson (2003; cf. Johnson, 1996, pp. 33-43) incorporates elements of this approach. According to Johnson (2003, p. 750), information fields provide the starting point for information seeking since they represent the typical arrangement of information stimuli to which an individual is daily exposed. Thus, information fields provide a maneuvering space for the information seeker, and they may significantly restrict the repertoire of information sources available for the individual. Individuals may be embedded in a physical world that involves recurring contacts with an interpersonal network of coworkers and computers providing access to the Internet, for example. Importantly, the physical context in organizations serves to stabilize an individual's information field and largely determines the nature of information individuals are exposed to on a regular basis.

Second, the realistic-pragmatic approach to spatial factors emphasizes the ways in which the availability of information sources in different places, such as daily work environments, orient information seeking (Savolainen, 2006a). The realistic-pragmatic viewpoint differs from the objectifying approach in that the spatial factors are not primarily seen as factors that compel people to adjust their actions to these structures. The realistic-pragmatic approach acknowledges the objective existence of constraining structures such as a person's physical distance from an information source. However, it is claimed that a person may adjust these realities partly by altering the source preferences—for example, favoring networked sources instead of visiting physical libraries.

Finally, the perspectivist approach to spatial factors draws on phenomenological ideas and focuses on how people subjectively assess the significance of various sources by means of spatial constructs such as information horizons (Savolainen, 2006a). The perspectivist approach places strong emphasis on the subjective and situation-bound interpretation of spatial factors. The label "perspectivist" emphasizes the significance that is given to the construction of source preferences. Sonnenwald's (1999) construct of information horizon provides a major example of the perspectivist approach. The information horizon can be seen as a map on which the user positions information sources according to his perceived importance in various contexts; for example, in performing a study task. The sources that are seen as most important for the task performance and thus are to be consulted first will be located closest to the information seeker, and the most peripheral ones will be farther off. From the perspectivist viewpoint, the information fields, for example, are not already there; they are simply to be discovered. First, they have to be perceived as a set of available sources in space and then put in preference order while seeking information.

# 3.2. Social factors

Particularly in workplace settings, attention has been devoted to social factors such as social rules, norms, organizational culture, and

social networks that provide contexts for information seeking and sharing (Courtright, 2007, pp. 281–284). In nonwork settings, identifying social qualifiers has been a more demanding task because everyday life information seeking and sharing are less directly influenced by norms and role expectations than the performance of work tasks.

In everyday life settings, the network theory of social capital exemplifies a relevant view on the nature of social factors of information seeking and sharing (Johnson, 2004). This theory focuses on the relationships between individuals, suggesting that the network of relationships comprises the social network. Social resources are seen as goods possessed by individuals in the network and can consist of intangible goods such as expertise. Access to these resources depends on the relationship with the individual possessing the resource and where one is located in the social structure. Therefore, this theory explains how the social network may constrain or enable access to resources embedded within the network. It is assumed that people who occupy the same level of the hierarchy tend to be more like each other and possess similar resources than people who occupy different levels (Johnson, 2004). Human beings prefer to interact with people who are similar to themselves in terms of lifestyles and socioeconomic status. In this way, so-called "strong ties" tend to develop between these individuals rather than between individuals who are dissimilar. Consequently, strong ties tend to link people who are similar, have access to the same resources, and are part of the same social strata (Granovetter, 1973). When seeking different resources, therefore, people need to utilize weak ties such as casual acquaintances.

In a study on examining information transfer via social networks among homeless populations, Hersberger (2003, p. 98) showed that social networks form important contextual factors that shape information sharing. Among these people, social networks tended to be fairly small. It also appeared that social networks of these people were sparse and unconnected. Williamson (1998) investigated the social factors shaping information seeking among elderly people. Her study revealed that the ways in which they monitor the everyday is mediated by social–cultural backgrounds and values, physical environments, and personal characteristics, such as their states of health, their socioeconomic situations, and lifestyles.

# 4. Procedure

In order to answer the research questions specified in Section 2 above, the studies of Chatman and Fisher (née Pettigrew) and their associates were examined based on an in-depth review of literature of studies on small world and information grounds. Articles, books, and conference papers by the above authors were identified by checking databases such as LISA and Web of Science; in addition, Fisher's homepage (http://projects.ischool.washington.edu/fisher/) was consulted to identify relevant literature. The focus was placed on studies characterizing the concepts of small world and information grounds. To sharpen the focus of the review, the ways in which other authors have used or interpreted these approaches in individual studies were not scrutinized, as this would have required a separate study.

The final sample included 13 relevant articles or other works written by Chatman and her associates, and 11 items from Fisher (or Pettigrew) and her colleagues. The above studies were reviewed in depth. To this end, most attention was devoted to the ways in which they elaborate the constructs of small world and information grounds. Particular attention was paid to how these constructs were specified in terms of their constitutive spatial and social factors. In the review, the major strategy was to identify similarities and differences in the conceptualizations of the spatial and social factors. In the study of spatial factors, most attention was directed to the conceptualizations of places, locales, and physical distances that affect information seeking and sharing. In turn, the study of social qualifiers of context

centered on the conceptualizations of social norms, social networks and social types as factors that facilitate or constrain information seeking and sharing. This research approach yielded a detailed picture of the contextual qualifiers to be discussed below.

# 5. The development of the constructs of small world and information grounds

#### 5.1. Small world

The main focus of Chatman's studies since the early 1980s lies in the everyday-life information seeking and sharing of people living in the margins of society. Characteristic of her long empirical research project is the attempt to develop a genuine social scientific theory of everyday information seeking and sharing in the context of small world. This construct refers to settings of everyday life where people have "little contact with people outside their immediate social milieu and are only interested in the information that is perceived as useful, that which has a firm footing in everyday reality, and responds to some practical concern" (Chatman, 1991, p. 447). Small world stands for local and often small-scale communities in which activities are routine and fairly predictable. In a small world, everyday information seeking and sharing is oriented by generally recognized norms based on beliefs shared by the members of the community.

The value of Chatman's contribution is not diminished by the fact that small world as a concept is not her original idea. Many scholars, such as Schutz and Luckmann (1973) and Wilson (1983), had addressed the issues of small world before. However, in Chatman's investigations, the concept of small world was given a more concrete interpretation than in the writings of social phenomenologists such as Schutz and Luckmann, for example. In a series of ethnographic studies, Chatman investigated the ways in which poor people seek, use, and communicate information within their small worlds. She focused on diverse groups such as janitors (Chatman, 1991) and elderly women residing in a retirement complex (Chatman, 1992). In a later study focusing on female prisoners, Chatman (1999) elaborated the concept of small world by proposing the life-in-theround theory. This theory refers to a dynamic world based largely on approximation. It is a world where imprecision is largely accepted and in exactitude tolerated and where "members move in and out of the round depending on their need for more systematic precise and defined information" (Pettigrew et al., 2001, p. 55). Understanding life in the round results when information is clear enough to give sensible

Chatman crystallized the major findings of her research in a theory of normative behavior (Chatman, 2000, pp. 10–14). This theory may be seen as an elaboration and extension of the theory of life in the round. The theory of normative behavior draws on four major concepts: social norms, worldview, social types, and information behavior. Social norms refer to standards that dictate rightness or wrongness in social appearances. Worldview is understood as a collective perception that members of a social world hold in common regarding things, which are important and things deemed trivial or unimportant. Social types are definitions given to members of a social world; thus, they pertain to a classification of a person or persons. Information behavior is defined as a state in which one may or may not act on the information received (Chatman, 2000, pp. 11-12). Therefore, normative behavior in general and information behavior in particular is understood as behavior that is viewed by inhabitants of a social world as most appropriate for that particular context. Unfortunately, Chatman's untimely death in 2002 meant that the formulations of the theory of normative behavior necessarily remained on a fairly general level. However, there are recent attempts to apply the theory in order to explore issues such as the social aspects of information access (Burnett et al., 2008).

#### 5.2. Information grounds

Originally, the concept of information grounds grew from Pettigrew's (1999, 2000) studies of everyday-information sharing among nurses and senior customers at community foot clinics in Canada. Pettigrew (later writing as Fisher) and her colleagues have elaborated this concept in a series of empirical surveys conducted in recent years. As Fisher, Landry, and Naumer (2007) point out, information grounds not only refer to a concept but more broadly to a research program on the role of social settings in everyday information behavior. Pettigrew (1999, p. 811) originally 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." Examples of information grounds refer to locales such as medical clinics, hair salons, and bookstores. More recently, Fisher, Marcoux, Miller, Sánchez, and Cunningham (2004) specified this definition by pointing out that many subcontexts exist within an information ground and are based on people's perspectives and physical factors; together these subcontexts form a grand context.

In developing the construct of information grounds, Fisher and her associates have drawn on diverse sources of ideas such as Granovetter's (1973) theory of the strength of weak ties. Another source of their inspiration is Ray Oldenburg's (1999) popular book *The great good place: Cafes, coffee shops, bookstores, bars, hair salons, and other hangouts at the heart of a community,* originally published in 1989 (Fisher & Naumer, 2006, p. 94). Oldenburg launched the term *third place,* referring to public places such as coffee shops, whose meaning can be found when one is not at home or at work.

The picture of information grounds has been elaborated in a series of field studies across varied populations, including new immigrants in Queens, New York (Fisher, Durrance, & Hinton, 2004), the general public in King County, Washington (Fisher, Naumer, Durrance, Stromski, & Christiansen, 2005), migrant Hispanic farm workers (Fisher, Marcoux, Miller, Sánchez, & Cunningham, 2004), college students (Fisher, Landry, & Naumer, 2007), tweens (Fisher, Marcoux, Meyers, & Landry, 2007), and stay-at-home mothers (Fisher & Landry, 2007). In the most recent characterization of information grounds, the concept is specified by referring to the people-place-information trichotomy (Fisher, Landry, & Naumer, 2007). More specifically, information grounds are perceived as a social construct rooted in an individual's combined perceptions of place, people, and information. As the numerous examples of recent studies suggest, the construct of information grounds has not been explicated in a final form; on the contrary, the approach is continually elaborated, both conceptually and empirically.

## 6. The conceptualization of spatial factors

#### 6.1. Small world

Interestingly, small world is not only a spatial metaphor; it also denotes concrete locales such as old people's homes as environments of information seeking and sharing. Chatman derived the idea of the centrality of location as a context of everyday action from many sources. One of them is provided by Edward Shils (1957). He pointed out that an individual is more concerned with what is at hand, present, and concrete than with what is remote and abstract (Chatman, 1999, p. 210). Thus, an individual tends to be more responsive on the whole to other people and to the status of those who surround him. Following this idea, Chatman (1999, p. 210) concluded that for members of a particular world, location determines those everyday things that require significant concentration and those that require no concentration at all.

This issue was explored in more detail in a study focusing on the information world of retired women. Chatman (1992, p. 111) found

that proximity is a critical element influencing networking among residents. The most frequent interactions were among neighbors living on the same floor and often with those who were only a few doors down from other. Places providing opportunities for information seeking and sharing were, for example, dining rooms and TV rooms where residents may convene (p. 10; p. 119). Further, events such as parties, picnics, outings, and other festive occasions also were relevant in this regard (p. 122).

Interestingly, the idea of small world has also been explored in the context of virtual space. Burnett, Besant, and Chatman (2001) investigated normative behavior in virtual communities and with feminist booksellers. The latter operated brick and mortar stores within specific local communities as part of the Women in Print Movement, and they produced a trade journal titled *Feminist Bookstore* (Burnett et al., 2001, pp. 542–545). Through this forum, the booksellers resembled virtual communities insofar as this journal relies in part on mediated, geographically dependent communications—that is, not only on face-to-face communications between the bookseller and her customers in physical communities. Existing apart from the constraints of the physical world, and mediated by the exchange of texts, each virtual community places itself within text-based small-world boundaries of its own design.

The findings of the empirical study suggested that virtual communities can become distinct from physically located small worlds and allow their participants to interact with one another as if there were no mediation involved in their interactions (Burnett et al., 2001, p. 538). On the Internet, such small worlds may include Usenet newsgroups and chat rooms, for example. Although the individuals may, as in the "real" world, move easily (if virtually) from place to place, the fairly stable boundaries of any given community reinforce its status as a small world. Burnett et al. (2001, p. 540) concluded that virtual communities, whereas they do differ in significant ways from real-life small worlds, must be seen as communities in the true sense of the word. In many regards, virtual communities represent special instances of small worlds, even though they are "not there" in the same way as geographically defined communities.

In sum: Spatial factors constitutive of small world both constrain and afford information seeking and sharing. In particular, physical proximity and conventionally shared locales such as dining rooms are important in terms of spatial factors, since they provide recurrent opportunities to seek and share information. The spatial qualities of small worlds are given new meanings when they are approached in virtual environments. The spatial features are more ambiguous since references to the physical distance between the interacting people become secondary. On the other hand, the above review suggests that the spatial factors intertwine with social ones and that investigating them separately can be grounded by analytical reasons only.

#### 6.2. Information grounds

Spatial factors are important qualifiers of information grounds since they are generally defined as an environment temporarily created by people who have come together to perform a given task (Fisher , Durrance, & Hinton, 2004; 2005; Pettigrew, 1999). From this local setting emerges a social atmosphere that fosters the spontaneous and serendipitous sharing and seeking of information.

The constitutive nature of spatial factors was confirmed in Pettigrew's (1999) study focusing on senior customers at a foot clinic. The physical environment is important in this regard (pp. 804–806). This category encompasses such details as the type of building, the room in which a clinic is located, and the way in which the furniture and other physical facilities are placed in the waiting room and the treatment area. The physical environment thus enables and constrains information sharing and seeking. The nature of this environment also affects the degree to which information may be exchanged publicly,

while the seniors were sitting in the waiting room; or privately between a nurse and a customer while in the treatment area. Therefore, the clinic is conceptualized as a physical and social setting that promotes information exchange. When the clinic is closed down in the evening, it disappears as an actual information grounds even though the physical locale naturally continues its existence. Seen from a temporal perspective, information grounds can be understood as a virtual context of information seeking and sharing.

In a study focusing on Hispanic farm workers and their families, Fisher, Marcoux, Miller, Sánchez, and Cunningham (2004) identified a number of information grounds, such as a farm workers' medical clinic, hair salons and barber shops, and a day-care center. Another survey based on a telephone survey of urban-rural residents revealed that the most commonly identified information grounds were places of worship, the workplace, and diverse activity areas such as clubs, teams, play groups, and places associated with hobbies (Fisher et al., 2005). A study focusing on college students, in turn, revealed that the convenience of the location of an information grounds is important. This characteristic also influences other factors, such as the degree of familiarity with the other people attending the information grounds or a sense of comfort from being close to home (Fisher, Landry, & Naumer, 2007). These findings parallel Oldenburg's (1999) notion of the third place discussed above. As locales of information seeking and sharing, information grounds are thus associated with something positive, inviting, attractive, free, and not constraining. From this perspective, emotional factors occupy a central role while people assess the significance of spatial factors for seeking and sharing information.

The question of the temporally sensitive (virtual) nature of information grounds is closely related to their relative permanence as places of information seeking and sharing. Importantly, in this context, Fisher, Landry, and Naumer (2007; Fisher & Landry, 2007) elaborated the nature of spatial qualifiers by devoting attention to the trichotomy people–place–information; this means that the meaning of spatial factors (places) is not constructed separately. From this perspective, it is important to focus on people as information sources available for face-to-face contacts in specific locales. Given the interplay of these factors, information grounds may exhibit diverse life cycles. As Fisher, Landry, and Naumer (2007) point out, information grounds may form in a wide variety of physical places and may be tied to them or move to new locations.

This aspect was evidenced in a study exploring college students' information grounds (Fisher, Landry, & Naumer, 2007). Some students indicated that their group meets at different coffee shops, while others indicated that the dynamics of their information grounds were closely tied to specific locations such as a particular bar. Hence, well-established locations may foster different types of information exchange than information grounds that are transient. The study also revealed that the level of perceived privacy may affect people's preference for particular information grounds. Places that include private areas for talking can foster conversations that may be personal. On the other hand, the ambient noise of information grounds such as loud restaurants may detract from conversation and information sharing.

In sum: The construct of information grounds provides a novel viewpoint on spatial issues by identifying a wide variety of locales where everyday information seeking and sharing occurs. The construct of information grounds is unique in that it thematizes spatial factors in conjunction with temporal ones, and shows how they interplay when information grounds are reproduced in everyday contexts such as foot clinics. The spatial qualifiers have been characterized in numerous surveys focusing on diverse groups. The findings provide support for Oldenburg's (1999) notion of the "great good place" that is perceived as an emotionally inviting and easily accessible arena of serendipitous conversation. On the other hand, similar to Chatman's studies, spatial factors become more interesting

if they are conceptualized in conjunction with social ones, referring to the presence of other people potentially able to provide relevant information.

#### 7. The conceptualization of social factors

#### 7.1. Small world

Social factors such as norms and social types occupy a particularly significant position in the conceptions of small world and life in the round. Similar to spatial factors, they represent contextual qualifiers that may facilitate or constrain information seeking and sharing.

In the conceptualization of social factors, Chatman draws on ideas from sociology. One source of ideas was Luckmann's (1970) study suggesting that small world is a world defined by beliefs shared by its members who act in accordance with the generally recognized norms and expectations. These emanate from the common worldview that allows the members to know the right order of things and make sense. Based on this, Chatman (1999, p. 209) maintains that life in a small world is one in which activities are routine and predictable. The horizons of this world are determined by social norms, and the source of these norms is social control. Norms set initial boundaries within which to play out one's life; thus, norms may be conceived of as codes of behavior that include ways to gauge normalcy (p. 213). Importantly, social norms provide a collective sense of direction and order. Social norms also indicate areas of relevance or things of value. In addition, social norms suggest a classification of social types such as insiders and outsiders (p. 210). In other words, social norms created and supported within a group determine labels applied to certain individuals with regard to their capacities to provide relevant information. Therefore, a collective view of what is relevant is central to understanding how small world operates in general and how information is sought and shared within it.

From this perspective, it is particularly important to understand how norms and social types such as insiders and outsiders are characterized as constituents of small worlds. The major ideas concerning insiders and outsiders were adopted from Merton's (1972) sociological study, and the dichotomy was utilized in the studies focusing on janitors (Chatman, 1991) and residents of a retirement community (Chatman, 1992). Insiders provide what Chatman calls "first-level" information that derives its relevance from shared experiences in the daily world. In contrast, information provided by outsiders is classified as second-level and is thus less useful for the daily needs of the inhabitants of small world because this type of information is not compatible with the common-sense reality of the small world. This means, however, that the insiders shield themselves from a variety of information resources that may be useful for them. Even if a source is perceived as potentially useful, it will not do much good to the individual if that source is not legitimized by "contextual others" such as other janitors. Hence, the contextual others importantly shape and define what problems are appropriate to pursue and acceptable for public closure (Chatman, 1996, p. 204).

The ways in which insiders of a small world seek and share information is elaborated by drawing on the characterization of social ties and social networks. This approach was best exemplified in Chatman's (1992) study of the information world of retired women. She identified major elements constitutive of social ties (Chatman, 1992, pp. 105–114). First, structural attributes such as interpersonal linkages and size of the network is important in this regard. The analysis of the structural attributes revealed that the residents experienced a support system, but for the most part these systems were extremely small. The fact that women lived in a housing arrangement for older adults increased their opportunities to meet other residents, thereby fulfilling an essential condition for networking. The most common experience of the women was to be part of

networks in which one or two persons were also members. Second, density—that is, the frequency with which members are in contact—is a characteristic of social ties. Not surprisingly, most of the residents interacted regularly with members of their families. Third, dispersion is closely linked with density, since it pertains to the degree of physical proximity that members of the network have to each other. Spatial and social factors intertwined here because the most frequent interactions were among neighbors living on the same floor and often with those who were only a few doors down from each other.

The content of information to be sought or shared, as well as forms or habits of seeking and sharing, were affected by social norms. These include beliefs about things considered as proper and appropriate in daily contexts. First, the norms manifested themselves in forms or habits of information seeking and sharing; e.g., which kinds of situations were perceived as proper for asking for advice or sharing an experience (cf. Fulton, 2005, p. 80). Times when the residents walked to dinner may exemplify such situations. Second and more important, the norms affected the ways in which information content was perceived as risky to be sought or shared. In particular, information about personal health issues could incorporate more risks since it could compromise the self-protection of the residents. Chatman (1992, p. 126) concluded that a major factor that influences residents' inability to freely share information is the phenomenon of facesaving; the respondents are concerned about maintaining their social position.

The study of the information world of prisoners (Chatman, 1999) brought her back to using a small-world conceptualization, though in terms of life in the round. The social factors primarily manifested themselves in social control based on social norms. Prison exemplifies a small world in which there is a collective awareness about what is important and what is not, which ideas are relevant and which are trivial, whom to trust and whom to avoid. In its truest form, a small world is a community of like-minded individuals who share co-ownership of social reality (Chatman, 1999, p. 213; p. 215).

Even more strongly than in the retirement community, social norms in prisons appear as standards with which members of a small world comply in order to exhibit desirable expressions of public behavior. Chatman (1999, p. 214) characterizes social norms as really powerful drivers of action since social norms "force private behavior to undergo public scrutiny. It is this public arena that deems behavior-including information-seeking behavior-appropriate or not." Members choose compliance because it allows for a way by which to affirm what is normative for this context at this time (Chatman, 2000, pp. 13-14). Primary conditions of information sharing are trust and believability. For information to take on legitimacy, it must be compatible with what members of the social world perceive to be plausible. Information is conceived of as credible if its provider is trusted. However, life in the round does not merely associate with a normative "iron cage" because it verifies one's condition socialized in the small world (Chatman, 1999, p. 216). Life in the round acknowledges everyday reality at its most routine and yields taken-for-granted life that provides ontological security for the inhabitants.

To summarize: The conceptions of small world and life in the round provide a nuanced elaboration of the social qualifiers of everyday information seeking and sharing. Drawing on sociological theories, Chatman demonstrates how social norms as standards of appropriate behavior and normalcy affect the forms or habits, as well as the content, of information seeking and sharing. Thus, these activities may only be rendered meaningful from the perspective of collective behavior, emphasizing the norms of face-saving and normalcy, driven by the expectations of the contextual others.

# 7.2. Information grounds

The nature of social qualifiers of information grounds significantly depends on the ways in which interpersonal sources are

available for face-to-face conversation (cf. Case, 2002, pp. 124–125). Interestingly, while elaborating social factors, Fisher and her colleagues do not particularly draw on the social scientific tradition, except for Granovetter's (1973) theory of the strength of weak ties. The main research strategy adopted by Fisher and her associates is inductive and is heavily grounded on empirical surveys focusing on diverse study populations. Based on the findings of these investigations, the picture of social qualifiers of information grounds is gradually enriched.

While investigating foot clinics as information grounds, Pettigrew (1999, 2000) paid attention to nurses' and senior customers' conversations as a context of information seeking and sharing. It appeared that whether or not a nurse gives information depends on the constraints of the setting (e.g., time), the nature of the senior's situation, and the nurse's willingness to "get involved" in that situation to some degree (Pettigrew, 1999, pp. 807–809). In particular, the seniors' interest in interacting with a nurse and other attendees is constitutive of social factors that affect information seeking and sharing. For the seniors, the clinic represented more than just a locale to visit in order to receive foot care; for many, their treatment was also a chance to chat with both new and old acquaintances and to get information about community issues. Thus, discussion with the nurses and other people provided opportunities to get a sense of what is going in the local community.

These social factors were further elaborated in later studies of information grounds. For example, a survey exploring information behavior of migrant Hispanic farm workers and their families revealed that most of the study participants referred to an interpersonal source while they were asked about their source preferences (Fisher, Marcoux, Miller, Sánchez, & Cunningham, 2004). In response to, "Why do you use this source?" the participants emphasized reliability, ease of access, familiarity ("knows me and understands my needs"), ease of use and conversation. Interestingly, the findings suggest that immigrants are seeking a particular social type; i.e., instrumental referral agents, people they can befriend and who can then connect them with needed information and other resources. In this case, the Hispanic immigrants used information they received from collegial sources who shared the same cultural interests and concerns, such as people they met at the Hispanic Catholic church community.

The most recent version of the conception of information grounds is based on the people-place-information trichotomy (Fisher, Landry, & Naumer, 2007). From the perspective of social factors qualifying the context of information seeking and sharing, the people-related characteristics are particularly central. First, they may refer to membership size. It could be hypothesized that the size of an information grounds influences the way information is created and exchanged because it affects the degree of intimacy and of access to broad information types. A study focusing on college students' information grounds demonstrated that for more than two-thirds of the respondents, the information grounds were typically small (2-10 people) to medium (11–25 people) in size, while large (26–50 people) and extra-large (51+ people) information grounds were quite rare. Second, membership type was explored in this context. It appeared that the information grounds were most often seen as open, in contrast to closed information grounds.

Homogeneity of information grounds is a social qualifier of information seeking and sharing as well. Many students identified homogeneity as being conducive to information exchange because of commonalities of interest, background, and situation (Fisher, Landry, & Naumer, 2007). Shared bonds such as "we are all minorities" tend to create a connection with people that prompted continued participation in information grounds. Reminiscent of Granovetter's (1973) notion of the strength of weak ties, highly homogenous groups comprise strong ties, serve to reinforce or strengthen existing bonds, and largely provide emotional support as opposed to high levels of new information. Highly heterogeneous groups, on the other hand,

feature weak ties and bring together otherwise unconnected people and new information

Fisher, Landry, and Naumer (2007) also explored the actor roles and social types, thus sharing interest in the same issues discussed by Chatman. However, more emphasis is placed on actor roles, while Chatman primarily discusses social types such as insiders and outsiders. According to Fisher, Landry, and Naumer (2007), actor roles are significant as they reflect the identity that participants assume and affect their role in information flow. In terms of college students' information grounds, several actor roles such as customer, student, and staff were identified. Social types, in turn, were perceived to represent important features of actors at information grounds because they indicate an individual's position in these arenas. Social types can, for example, enable unique access to everyday information because they represent a weak tie or provide emotional support and legitimacy as a strong tie. Interestingly, the findings of the study by Fisher et al. suggest that people tend to attend information grounds voluntarily. However, in some settings, such as bus stops or store queues, information grounds may qualify as "hostage phenomena" because one has little choice but to be present. Overall, the study demonstrated that information grounds are a social construct rooted in an individual's combined perceptions of place, people, and information (Fisher, Landry, & Naumer, 2007). People-related factors are central social qualifiers of information seeking and sharing; in the above study, they were based upon trustworthiness, diversity, similar beliefs and opinions, common interests, and the helpfulness of the

In sum: The social factors of information seeking and sharing were initially specified by referring to the qualities of social presence in interaction situations. In this regard, the different potential of people representing weak or strong ties was emphasized. Later, the picture of social factors was refined by thematizing social roles and social types, partly reminiscent of Chatman's ideas of small world. However, the most recent approach to information grounds is profiled by drawing on the trichotomy of people–place–information. From this perspective, the aspect of people appears to be particularly central for the elaboration of the social factors.

# 8. Discussion

Since the concepts of small world and information grounds draw on spatial metaphors, it is not surprising that locales are perceived as important qualifiers of contexts of information seeking and sharing. It appeared, however, that locales per se are not particularly interesting if they are reviewed separately from social factors. Ultimately, social factors render information seeking and sharing meaningful as something that people do together when they are copresent and share the same physical space. In this regard, the study identified similarities and differences between the research approaches. The main findings of the study are summarized in Table 1.

Both approaches share interest in the various forms of copresence of people as a basic factor that enables or constrains information seeking and sharing. Second, both Chatman and Fisher devote attention to the qualities of the locales as places that afford face-to-face conversation. Third, both approaches share interest in the social types as constructs that provide clues about the relevance of individual people as sources of information.

However, the differences between the constructs of small world and information grounds seem to be more significant than their similarities. The construct of small world places the major emphasis on normative constraints of information seeking and sharing; the need to comply with the norms created by insiders is the major motivation. Similarly, the norm of face saving occupies a central place. Overall, small worlds are depicted as relatively closed places whose inhabitants are bound to live there for a longer time. Because of the dominant influence of insiders' views, the inhabitants are suspicious

of information provided by outsiders. Spatial and social factors intertwine, and they produce a predominantly constraining context of information seeking and sharing. In the end, small world as a spatial and social context of information seeking and sharing is best rendered as meaningful if it is approached from the perspective of normative behavior.

In contrast, the conceptualization of information grounds is not tied with the perspective provided by a particular theory of information behavior. The phenomena of information seeking and sharing are rendered meaningful by referring to the ways in which diverse combinations of people, place, and information afford these activities. Information grounds are depicted as freely chosen and publicly accessible great good places where people spontaneously convene; as a by-product of goal activities such as shopping, they may go to seek and share information there. The norm pressure to comply is low, and the actors may come from all walks of life. This is a realm of freedom; information grounds seldom qualify as hostage phenomena due to forced copresence of people. Spatial and social intertwine, and they produce contexts that invite the sharing of information with copresent people and seek it from them as well.

Overall, the approach to information grounds seems to epitomize better the contexts of information seeking and sharing of our time. Wellman (2006) asserts that the developed world is in the midst of a paradigm shift both in the ways in which people and institutions are actually connected. It is a shift from being bound up in homogeneous "little boxes" to surfing life through diffuse, variegated social networks. The little boxes metaphor connotes people socially and cognitively encapsulated by homogeneous, broadly embracing groups. However, as Wellman asserts, work, community, and domesticity have moved from hierarchically arranged, densely knit, and normatively bounded little boxes to social networks. In networked societies, boundaries are more permeable, interactions are with diverse others,

**Table 1**Conceptualization of spatial and social factors constitutive of the context of information seeking and sharing

Conceptualization of contextual factors	Small world	Information grounds
Spatial factors	Characterization of physical spaces, such as dining rooms, enabling or constraining information seeking and sharing Emphasis on physical proximity of actors	Characterization of physical spaces, such as foot clinics, enabling or constraining information seeking and sharing The pulling or pushing features of locales; for example, comfortable seating and ambient noise
	Examples of typical locales: old people's homes, prison	Examples of typical locales: bars, restaurants, hair salons, supermarkets, clubs
Social factors	Social norms as standards of appropriate behavior and normalcy	Strong and weak ties
	Social types: insiders vs. outsiders	Social types: suggestive of a person's capacity to provide information of various kinds
	Social networks as constituents of social ties (size, density, and dispersion of networks)	The aspect of people in the people-place-information trichotomy
Characteristics typical of the context of information seeking and sharing	Normatively bound by the expectations of the "contextual others," closed, routinely reproduced, predominantly constraining, relatively enduring, conservative	Spontaneously constituted, predominantly open for all, freely chosen by diverse actors, minimally constraining, providing opportunities, elusive, temporally sensitive, flexible

linkages switch between multiple networks, and hierarchies are both flatter and more complexly structured. This means that rather than fitting into the same group as those around them, each person has her own personal network. Most people operate in multiple, partial communities as they deal with shifting, amorphous networks of kin, neighbors, friends, workmates, and organizational ties. This is a time for individuals and their networks, and not for groups, argues Wellman. Autonomy, opportunity, and uncertainty are the rule, and the rapid development of computer-communications networks nourishes societal transitions from little boxes to social networks. These developments resonate well with characteristics typical to information grounds.

On the other hand, Wellman (2006) forecasts the rise of networked individualism that emphasizes person-to-person connectivity. Moving around with a mobile phone or wireless Internet makes people less dependent on places characteristic of conventional information grounds. Because connections are to people and not to places, the technology affords the shift to a personalized, wireless world, with each person switching between ties and networks. Although the Internet has its unique attributes, people continue to value the in-person experiences that proximity affords, forecasts Wellman. This suggests that conventional information grounds, such as hair salons, are relevant also in the future, even though the significance of networked information grounds such as Facebook may grow.

From this futuristic perspective, the ideas characteristic of small world may appear as hopelessly outmoded. The construct seems to have lost much of its relevance because it approaches the contexts of everyday action in terms of little boxes that were characteristic of the traditional industrial society.

Undoubtedly, there is a need to rethink the applicability of the construct of small world as a context of information seeking and sharing. To expand the small world concept from a narrow focus on the constraining contexts of information poverty to a broader examination of other information contexts as well, virtual communities provide particular challenges for researchers. Unlike information-poor people such as the janitors described by Chatman (1991), users of the networked services have the power and option to go readily beyond their small worlds if they choose too. This is quite different to how Chatman initially defined a small world, as a world characterized by barriers, limited opportunities, and high risk. On the other hand, Burnett et al. (2001) showed in an empirical study on normative behavior in virtual communities and feminist bookselling that the conception of small world can be used in networked contexts, too. In addition, the conceptions of small world and life in the round may still be relevant in the study of local communities such as firmly established cliques at work places, as well as fairly closed communities like old people's homes.

As an evolving research project, the conception of information grounds holds good promises to elaborate the contextual features of information seeking and sharing. Reflecting on this perspective, Fisher, Landry, and Naumer (2007) provide a number of future research questions. One of them concerns the life cycles of information grounds: How do these grounds emerge, how are they sustained, and how might they cease to exist? The study of such issues is important in elaborating the construct of information grounds not merely as physical places but also as temporally sensitive, virtual, and social spaces that enable information encountering, seeking, and sharing. On the other hand, an exciting research perspective may be opened by exploring the conceptions of information grounds and small world as complementary constructs (cf. Fisher & Naumer, 2006, p. 106). Thus, it may be studied how particular information grounds are an element of the small world phenomenon and under what circumstances. This issue could also be examined from an opposite point of view: Would an information grounds become stabilized and grow into a small world due to the fact that the same people frequent this grounds and form a clique?

Overall, this suggests that the degree and openness of contexts tend to vary, and that both small worlds and information grounds are needed to provide a realistic picture of the contexts of everyday information seeking and sharing. Because it is evident that all information seeking and sharing does not occur in these contexts, the constructs of small world and information grounds may be elaborated further. This may be carried out by examining their significance in relation to other contexts that are not primarily qualified by people bumping into each other in third places or the expectations of the contextual others.

#### 9. Conclusion

Small worlds and information grounds are physical and social spaces that in varying degrees afford everyday information seeking and sharing. Both constructs provide insightful views on the interplay of spatial and contextual factors shaping these activities. On the other hand, it is apparent that the studies conducted by Chatman and Fisher have not succeeded to tame the unruly beast discussed by Dervin (1997), because novel issues dealing with the elaboration of the contextual features of small world and information grounds have emerged. This is exemplified best by the recent efforts taken by Fisher, Landry, and Naumer (2007) to specify the relationships between people, places (physical as well as virtual), and information. New characteristics of the spatial and social factors may also be found while reconceptualizing the phenomena of small world from the perspective of information grounds, and vice versa.

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