

May 2007

Beyond Theoretical and Methodological Pluralism in Interpretive IS Research: The Example of Symbolic Interactionist Ethnography

Michael T.K. Tan

University of Nevada, Reno, mtktan@unr.edu

Wendy Hall

University of British Columbia

Follow this and additional works at: <https://aisel.aisnet.org/cais>

Recommended Citation

Tan, Michael T.K. and Hall, Wendy (2007) "Beyond Theoretical and Methodological Pluralism in Interpretive IS Research: The Example of Symbolic Interactionist Ethnography," *Communications of the Association for Information Systems*: Vol. 19 , Article 26.
DOI: 10.17705/1CAIS.01926

Available at: <https://aisel.aisnet.org/cais/vol19/iss1/26>

This material is brought to you by the AIS Journals at AIS Electronic Library (AISeL). It has been accepted for inclusion in Communications of the Association for Information Systems by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.



BEYOND THEORETICAL AND METHODOLOGICAL PLURALISM IN INTERPRETIVE IS RESEARCH: THE EXAMPLE OF SYMBOLIC INTERACTIONIST ETHNOGRAPHY

Michael T.K. Tan
University of Nevada, Reno
College of Business Administration
mktan@unr.edu

Wendy Hall
University of British Columbia
Vancouver, British Columbia

ABSTRACT

Over the years, interpretivism has been gradually gaining ground in Information Systems (IS) research. At the heart of this interpretivist movement (which has helped to advance its cause) is a belief in theoretical and methodological pluralism.

Against this backdrop, the purpose of this paper is to reflect on how interpretive IS researchers can move beyond theoretical and methodological pluralism to leverage the inherent strengths of the interpretivist paradigm. In this regard, we note that there has been little discussion in IS literature about how interpretive researchers can actively seek to purposefully leverage the respective strengths of the informing theoretical perspective and the chosen strategy of inquiry throughout the research process while being fully cognizant of the ensuing criteria for ensuring trustworthiness of the study.

To illustrate the importance of achieving such leverage in interpretive IS research, we use the example of the ethnographic approach being informed by symbolic interactionism. At the same time, we explicate how the analytical edge of the constant comparative technique from grounded theory can enhance this leverage. We contend that this paper's contribution has value as it provides a starting point for interested researchers to apply this approach to other combinations of theoretical perspectives and strategies of inquiry.

Keywords: interpretive research, qualitative research, symbolic interactionism, ethnography, research strategies, research methods

I. INTRODUCTION

THE EMERGENCE OF INTERPRETIVISM IN INFORMATION SYSTEMS (IS) RESEARCH

Over the years, the IS discipline has been advancing toward greater scientific maturity in terms of the unique contributions of its knowledge and the extent to which such knowledge is

disseminated across the scientific community as a whole [Baskerville and Myers 2002; Katerattanakul et al. 2006]. One key factor has been an increasing conviction within the discipline that researchers should extend their foci from only “the technology (hardware, software, data, networks) or the social setting (people, business processes, politics, economics, psychology, culture, organization, and management) to rich phenomena that emerge from the interactions between the two” [Lee 1999a]. Indeed, it has been argued that a distinctive contribution of the IS field lies in its focus on phenomena “that emerge whenever the technological and the social come into contact with, react to, and transform each other” [Lee 1999a]. At the same time, it is important to be mindful that IS research is different from traditional scientific research in that it has to develop a body of academic knowledge while providing practice-oriented insights relevant to the industry [Harvey and Myers 1995].

When considering the pursuance of these multi-faceted objectives, recognition of the positivist-interpretivist tension that has permeated the IS discipline for much of the past decade is important [Walsham 1995; Orlikowski and Baroudi 1991]. To recap, on one side of this “divide” are the so-called “mainstream navigators” while on the other side are the “knights of change” [Landry and Banville 1992]. The former group is said to consist of followers of the dominant approach of positivism, while the latter group strives to advance the cause of new methods or theories and include supporters of interpretivism. While there has been ongoing critique of positivism over the years (post-positivism is an attempt to address these criticisms), it is increasingly clear that the interpretivist approach is gradually gaining ground in IS research [Prus 1996; Walsham 1995]. At the heart of this interpretivist movement (which has helped to advance its cause) is a belief in theoretical and methodological pluralism - that alternative interpretive understandings can be valuable by offering different but equally interesting insights [Walsham 1995].

THEORETICAL PLURALISM

In many disciplines, the concept of theoretical pluralism is generally accepted on grounds that have been well elucidated by various philosophers of science. In other words, the case for a plurality of theories rather than a single, all-embracing theory to guide research is quite well understood. Perhaps the most eloquent statement on this issue comes from the domain of literary criticism. One of the chief architects of the Chicago Neo-Aristotelian school, Ronald S. Crane contends that the concept of pluralism is important in that “there are and have been many valid critical methods, each of which exhibits the literary object in a different light, and each of which has its characteristic powers and limitations” [Merton 1996].

In IS research, a variety of theoretical perspectives such as structuration theory, actor network theory, critical social theory and symbolic interactionism (albeit to a lesser extent than the others) have been used in different studies over time to illuminate various micro and macro aspects of complex phenomena. For example, symbolic interactionism emphasizes the need to examine the role of meaning and human interactions [Blumer 1998; Mead 1934] while critical social theory goes further to investigate the broader social, cultural, political, and historical contexts within which such interactions are conducted, as well as to provide a social critique in the hope of emancipating human actors [Ngwenyama and Lee 1997].

METHODOLOGICAL PLURALISM

Similarly, methodological pluralism is generally well accepted in the absence of a single conclusive final methodological or epistemological principle [Samuels 1997]. On one hand, researchers accept that they have to choose between alternative methodologies each of which has its own internal limitations. On the other hand, methodological pluralism emphasizes that the object of study is likely to have many different facets that can be approached from different standpoints, and that in fact, different approaches may yield quite different theories and understanding.

In IS research, a variety of strategies of inquiry such as ethnography, grounded theory, case study and action research have been used to guide fieldwork in various organizational settings.

For example, the descriptive strengths of ethnography and the analytical edge of grounded theory have been leveraged in different studies over time to yield different insights related to specific IS phenomena. In this regard, particularly noteworthy is the fact that the constant comparative technique of data analysis used in grounded theory has been “informally” adopted over time by many qualitative researchers. Such adaptation has come about because the basic premise of the constant comparative method is compatible with the inductive, concept-building orientation of qualitative research in general [Merriam 1998].

INCREASING COMPLEXITY OF IS PHENOMENA

In interpretive IS research, the leverage of theoretical and methodological pluralism over time has thus helped to yield insights in many areas. However, IS phenomena are becoming increasingly complex. At the organizational level for instance, information systems have been described as attempts by human actors to concretize concepts and processes so as to algorithmically compress the complex elements of the organization into a “representation” suitable for the efficient communication of informational content [Chia 1998]. In this regard, the problem of “representation” versus “reality” has long been at the center of philosophical debates in many disciplines – for example, the philosophy of language has for years been grappling with issues such as the relationship between symbols and that which they stand for [Introna 1997]. In the IS discipline specifically, there has similarly been increasing cognizance of this issue (of representation vs. reality). Today, human actors are no longer depicted as simply “receiving pre-packaged information to utilize in objective and neutral decision making” – instead, they are “always in the net of power” [Introna 1997]. Beyond just being “representations,” the potential of information technologies (IT) to transform social and organizational life has also become an important theme in IS literature. Indeed, through interactions with workers, information technology (IT) has shaped and is continuing to shape new forms of practices and communities, while interacting with the economic, technical and social environments in organizations. Many studies have thus investigated the impact of IT on people, but such research has often revealed contradictory findings both within and across studies [Robey and Boudreau 1999]. For example, human involvement in the appropriation and use of IT has raised several seemingly paradoxical issues, for example: Does technology force users to improvise in order to integrate it into their work? Or do users actively, proactively, or reactively adjust such technologies accordingly to fit their work behaviors [Rolland and Herstad 2000]? In a similar vein, do different users accept or resist a new technology because they subscribe to different notions of its implications? And how do these different notions arise in the first place? As IT becomes progressively more assimilated into social contexts, IS researchers require research approaches that contend with the increasing complexity of IS phenomena.

BEYOND THEORETICAL AND METHODOLOGICAL PLURALISM

Against this backdrop, we argue that there is a need to move beyond theoretical and methodological pluralism in the study of such increasingly complex IS phenomena. Unlike other social science disciplines, there has been little discussion in IS literature about how researchers can effectively combine the respective strengths of the informing theoretical perspective and the chosen strategy of inquiry during the course of an interpretive study. Specifically, we note that IS researchers have not adequately highlighted the implications of using a theoretical lens with a particular methodology in terms of their joint impact on all aspects of the research process, including due consideration of the ensuing criteria for ensuring trustworthiness of the resulting study. This discussion is important as effective leverage of the respective strengths may contribute towards greater insights into the phenomenon under study, while incompatibility between the theoretical perspective and the underlying strategy of inquiry may undermine the ability to triangulate data collection and analytic strategies (and ultimately, the trustworthiness of the research).

For example, many social science disciplines have generally appreciated the utility (and accompanying implications) of using symbolic interactionism as a theoretical perspective to guide

ethnographic research about complex social phenomena [e.g., Prus 1996; Rock 2001]. Exemplar studies in those fields include many insightful works by various Chicago School sociologists on the action-seeking lifestyles of street youths [Sato 1992] – a particularly noteworthy study is Whyte's [1943] Street Corner Society. A more recent study by Mandell [1992] on childhood socialization also provides very interesting insights on the Meadian question of how little children move from private, hidden meanings to publicly shared understandings of involvement objects, and on how as an ethnographer, she [Mandell] did not try to “become a child” (a virtual impossibility) while trying to become as “minimally adult” as possible (a dialectical tension nevertheless). Such insights would not have been possible without leveraging the combined strengths of symbolic interactionism and ethnography. However, to the best of our knowledge, there are no similar exemplars of using symbolic interactionism to guide ethnographic research in IS literature.

In an eloquent treatise of the need to achieve greater (epistemological) coherence between the theory, methods and research which typifies the social sciences vis-à-vis the actual human lived experience, Prus [1996] provides an insightful treatment of the importance of combining symbolic interactionism with ethnography. In a similar vein, Rock [2001] usefully describes how the practice of this approach should flow directly from the organizing assumptions of symbolic interactionism itself. We extend this discussion by noting that while the empirical strengths of ethnography have been quite well discussed in IS literature (especially with regard to its ability to provide rich insights by focusing on actual practice in situ through prolonged immersion in the field, e.g. participant observation), a key weakness of many such studies lies in their lack of “conceptual depth” and in the tendency for the researcher to get overwhelmed by “huge amounts of disconnected data” [Charmaz and Mitchell 2001; Hammersley 1992]. In fact, many ethnography accounts have been criticized as just providing common-sense descriptions, rather than theoretically grounded conceptual analyses [Hammersley 1992].

To complement the empirical strengths of ethnography while compensating for its lack of “conceptual depth,” theoretical perspectives such as symbolic interactionism could be useful in guiding the IS researcher. But how can such a study be conducted so that the theoretical strengths of symbolic interactionism and the empirical strengths of ethnography are fully leveraged, while ensuring the trustworthiness of the findings?

In this regard, we note that such leverage and trustworthiness may be best realized through achieving congruence between the research question(s), the informing theoretical perspective, the chosen strategy of inquiry, the data collection methods used, the approach to analysis, and the products of the inquiry. Specifically, we argue that the researcher must actively seek to purposefully leverage the respective strengths of the informing theoretical perspective and the chosen strategy of inquiry throughout the research process (from research design to fieldwork preparation, data collection, data analysis, and culminating in the final written account), while being fully cognizant of the ensuing criteria for ensuring trustworthiness of the study. While the general idea behind this concept may be intuitive, its specific articulation is currently lacking. In this paper, it is our objective to bring much needed formality, structure and attention to the possible importance of such leverage in interpretive IS research. We contend that this contribution has value - and at a particularly important juncture in the development of the IS discipline.

FOCUS OF THIS PAPER

To reiterate, the purpose of this paper is to reflect on how the cause of interpretive IS research can be advanced by moving beyond theoretical and methodological pluralism to purposefully leverage the inherent strengths of the interpretivist paradigm. To demonstrate the possible importance of such leverage to interpretive IS research in this regard, we use the example of an ethnographic approach which is informed by symbolic interactionism. In so doing, we build on the work of Prus [1996] and Rock [2001].

While other theoretical perspectives such as critical social theory, structuration theory and actor network theory may also be appropriate in informing the ethnographic approach, we focus on symbolic interactionism in this paper due to increasing interest in the role of symbolism within organizations [Turner 1990]. We believe that this theoretical perspective has the potential to highlight different identities or voices associated with different individuals, positions, or special interests in order to better understand the complexity of IS phenomena, while acknowledging shared realities. Furthermore, we note that in spite of its obvious theoretical strengths, this perspective has not received the attention it deserves in IS empirical research. More extensive application of this theoretical perspective could offer fresh and interesting insights in many IS research areas.

The rest of this paper will proceed as follows. We begin by enumerating the implications for IS research of combining the theoretical strengths of symbolic interactionism and the empirical strengths of ethnography in an interpretive study. Next, we assess the methodological fit between symbolic interactionism (as the informing theoretical perspective) and ethnography (as the chosen strategy of inquiry). Based on this fit, we then discuss how the benefits of the “symbolic interactionist ethnography” approach can be realized during the research process, while ensuring the trustworthiness of the findings. At the same time, we explicate how the analytical edge of the constant comparative method from grounded theory can enhance such an approach, by helping to move the ethnographic study toward theoretical interpretation of symbolic interactions in the particular research setting. We conclude by urging interested IS researchers to contemplate the applicability of such leverage for other combinations of theoretical perspectives and strategies of inquiry.

II. SYMBOLIC INTERACTIONIST ETHNOGRAPHY

THEORETICAL STRENGTHS OF SYMBOLIC INTERACTIONISM

Symbolic interactionism is one of several interpretive approaches in social science research. This approach arises largely from the teachings of Mead [1934] but it was Blumer [1998, p. 2] who proved influential in developing it into a theoretical perspective with three basic assumptions related to the genesis and evolution of meaning and identity: “that human beings act toward things on the basis of the meanings that these things have for them”; “that the meaning of such things is derived from, and arises out of, the social interaction that one has with one’s fellows”; “that these meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters.” Perhaps the most succinct distillation of the essence of symbolic interactionism comes from Blumer [1997, p. 3] himself: “The symbolic interactionist approach rests upon the premise that human action takes place always in a situation that confronts the actor and that the actor acts on the basis of defining this situation that confronts him.”

A survey of the literature reveals that the following enumeration of symbolic interactionism by Reynolds [1990, pp. 188-127] may best capture its theoretical strengths: reality is understood as a social production; interaction is symbolic; humans have the capacity to engage in self-reflexive behavior; the group is an important factor in the shaping and motivation of behavior; interactionism regards society as ongoing process; and social and physical environments set limits on behavior, but do not determine behavior. In this regard, Hall [1987] has provided analytic categories that focused symbolic interactionism on the meso domain, where situated activity, social structure, and history converge.

It is important to reiterate that symbolic interactionism is not just about the study of symbols. Instead, the significance of this theoretical perspective stems from its twin emphases on the importance (to understanding human behavior) of both symbols and the interpretative processes that under-gird day-to-day interactions [Patton 1990, p. 76]. The term “symbolic” refers to a basic premise that humans live in a world of objects (e.g., physical as well as social objects) that do not have intrinsic meanings. Instead, the meanings of objects arise out of the interpretations that

people assign to them during the course of everyday social “interactions” with others. Out of these interactions, “shared “ as well as local (to the actor) meanings emerge but are always subject to the possibility of change. This continuing process of interpretation takes place primarily using the shared symbols of language. People make sense of their world using symbols which convey the meanings of different objects, and these meanings (including the concept of self) in turn influence people’s actions toward the objects [Swan and Bowers 1998]. Over the years, these ideas have been gradually extended by other prominent researchers such as Maines [1977] and Stryker [1981], and as a result, symbolic interactionism has evolved into an influential school of thought, which has maintained its position in social science research [Prasad 1993].

IMPORTANCE OF SYMBOLIC INTERACTIONISM TO IS RESEARCH

In recent years, there has been increasing interest in the role of symbolism within organizations [Turner 1990]. Indeed, Staw [1985] argues that symbolism may have greater “predictive power over more conventional observations of variables.” Specifically, symbols may be playing a critical role in organizational life as they provide an important means for simplifying and understanding a complex world [Hirschheim and Newman 1991].

Similarly, a theoretical recognition of the symbolic nature of computers and IT in organizations has gained strength [Prasad 1993]. For example, Turkle [1984] critiqued past studies of computerization for not appreciating that the technology may evoke different symbolic meanings for different people. In the same vein, Brissy [1990] uses a “mystery-magic-alchemy” continuum to describe the symbolism of computers in organizations.

In IS literature, prominent researchers have similarly recognized the importance of symbolism to capture intersections between organizational and technological contexts. For example, Hirschheim and Newman [1991] contend that symbolism holds promise in facilitating an understanding of the information systems development process, thus challenging a commonly held assumption that is based on conventional economic rationality. Similarly, Kendall and Kendall [1993] use metaphors as cognitive lenses to examine the system development process, while Robey and Markus [1984] describe the functions of rituals in the systems design process.

As noted by Prasad [1993], symbolic aspects of computerized work can in fact be studied from various theoretical perspectives, including cognitive mapping, semiotics, cultural anthropology and rhetorical analysis; however, symbolic interactionism is particularly appropriate for the study of technological symbolism in organizations because it simultaneously emphasizes process issues (interactions) and the role of meaning [Prasad 1993]. As such, it is surprising that there have only been a few noteworthy organizational studies in IS literature which explicitly use this theoretical perspective. Prasad’s [1993] and Gopal and Prasad’s [2000] studies immediately come to mind, although Prasad’s [1993] paper appeared in the *Academy of Management Journal* which is not a mainstream IS publication outlet.

In this regard, we argue that symbolic interactionism may hold considerable promise for IS research, since the prime focus of the discipline has always been on the rich phenomena that emerge from the interactions among information technologies, the users of these technologies, and the organizational and social contexts of such use. For example, Markus and Robey [1988] identify three conceptions of causal agency in IS literature: technological imperative, organizational imperative and emergent perspective. Consistent with the philosophical foundations of symbolic interactionism, the emergent perspective holds that “the uses and consequences of information technology emerge unpredictably from complex social interactions.” Similarly, other researchers have also argued that technology is socially constituted [e.g., Orlikowski 1992; Orlikowski and Robey 1991]. Collectively, these arguments imply that any inquiry of IT may benefit from an understanding of the influence of social interactions on the development, management and use of such technologies.

EMPIRICAL STRENGTHS OF ETHNOGRAPHY

Ethnographic research comes from the discipline of social and cultural anthropology where an ethnographer is required to immerse him or herself in the life-worlds of the people studied [Lewis 1985]. In the process, the ethnographer generally relies on three sources of data to achieve such intimate familiarity: observation, participant-observation and interviews [Prus 1996]. By spending an extended period of time in the field, he/she seeks to place the phenomena in their social and cultural context. Observation and participant observation, inherently important elements of ethnography, offer opportunities to observe interactions among participants [Emerson, Fretz, and Shaw, 1995]. In this regard, extensive fieldnotes, based on observation and participant observation, provide the basis for data analysis and the final ethnographic account.

While lengthy, ethnography is intense and “data-rich” [Rock 2001]. Specifically, “ethnography is highly particular and hauntingly personal, yet it serves as a basis for grand comparison and understanding within and across a society” [Van Maanen 1988]. More importantly, the specific ethnographic voice adopted translates into realist, confessional or impressionist tales, each with its different but perhaps equally absorbing account of the researcher’s immersion in the social world of others [Van Maanen 1988]. Pushing the boundaries even further, some ethnographers are passionate advocates of “vulnerable writing” based on the argument that such a writing style may produce poignant insights not possible with other ethnographic voices [Behar 1996]. With such empirical strengths, this strategy of inquiry is especially suited for research where the phenomenon is unclear, complex and embedded in a social system that is poorly understood or even unknown [LeCompte and Schensul 1999].

IMPORTANCE OF ETHNOGRAPHY TO IS RESEARCH

Given that much of recent IS research has focused on the social and organizational contexts of information systems, ethnographic research has emerged as one important means of studying these contexts [Harvey and Myers 1995; Prasad 1997]. This is due to the inherent advantages of the ethnographic approach which can facilitate an in-depth understanding of the focal IT, the actors involved, the organization, and the broader context of the IT usage [Myers 1999]. In particular, participant-observation “allows the researcher to get infinitely closer to the lived experiences of the participants than does straight observation” [Prus 1996, p.19]. Such lived experiences include “the shaping, the forging, the forming, the constructing, the implementing, the ad hocing, the building up, of human interaction” [Prus 1996, p. 148] which are inherent in many current-day IS phenomena. In this way, existing assumptions may often be challenged as a result of acquiring new knowledge and vital information about the IS phenomenon in question. For the ethnographic researcher, the key to an accurate understanding lies in striving for as much balance in representation as possible, by developing a “thorough appreciation of where and in what ways one’s own experiences may approximate and differ from those of others in the setting” [Prus 1996, p. 20]. Relevant IS research topics that are suited to the ethnographic approach thus include a wide range of important investigative studies including but not limited to the longitudinal and complex dynamics involved in enterprise-wide system design and implementations, IT-based organizational change, business process reengineering, organizational learning projects, and IT functional and project management [Davies 1991; Davies and Nielsen 1992; Hughes et. al. 1992; Myers 1999; Orlikowski 1991; Preston 1991; Schultze 2001].

METHODOLOGICAL FIT BETWEEN SYMBOLIC INTERACTIONISM AND ETHNOGRAPHY

As a theoretical perspective, symbolic interactionism does offer some limited guidance regarding the actual conduct of the research [see Blumer 1998] but as cogently argued by Prus [1996], the interactionist researcher will benefit greatly from the complementary use of the ethnographic approach. On the other hand, many ethnographic studies have been criticized for lack of conceptual depth [Hammersley 1992]; as such, ethnographers may benefit from the use of symbolic interactionism as a theoretical perspective to guide the research. To understand the methodological fit between symbolic interactionism and ethnography in this regard, it is important

to first clarify the *ontological*, *epistemological* and *methodological* assumptions of the interactionist perspective [Guba and Lincoln 1994].

Firstly, the *ontological* position of symbolic interactionism is that local (multiple) as well as shared constructed realities exist for the individuals or groups holding the constructions. Out of ongoing day-to-day interactions, shared as well as local meanings emerge (and are continually subject to change). To elaborate, while people may thus symbolically subscribe to certain (shared) notions at a broader level, these notions may convey different (local) meanings for different people in different institutional contexts [Gopal and Prasad 2000; Prasad 1993]. For example, although computerization may symbolize chaos and turmoil in a particular organization as a whole, the meanings of chaos may differ between different groups/individuals within that organization [Prasad 1993]. Secondly, in terms of *epistemology*, the investigator and the object of investigation are assumed to be interactively linked so that the “findings are literally created as the investigation proceeds.” With regards to *methodology*, symbolic interactionism’s position is that local (multiple) and shared constructions of reality can be elicited and refined only through interaction among the investigator and respondents in naturalistic settings where behavior can be observed. These constructions are then interpreted, and compared/contrasted through a dialectical interchange.

Considering its ontological, epistemological, and methodological positions, any research work grounded in this theoretical perspective clearly requires a strategy of inquiry that is empirically sensitive to the human capacity for symbolic interaction [Prus 1996]. In fact, at a high level, this perspective appears to fit best with the broad methodological underpinnings of ethnography: an empirical method based on immersion in the setting being studied which remains open to elements unknown at the start of the study; and grounded in the observed phenomenon in the field.

To realize the synergy between this theoretical perspective and the strategy of inquiry used, Prus [1996, pp.15-18] presents a set of assumptions that researchers working within an interactionist/interpretive tradition will normally make when conducting field research, which is summarized as follows: Human group life is intersubjective, (multi) perspectival, reflective, activity-based, negotiable, relational, and processual. More specifically, four major interactionist implications for ethnographic research are discernible: respecting the essence of the subject matter (nature of human group life), achieving intimate familiarity (with the phenomenon), developing concepts (sensitive to the phenomenon) that can foster comparisons and contrasts, and understanding the process of interactions [Prus 1996]. Lending voice to this refrain, Rock [2001] adds that the ethnographic study grounded in this theoretical perspective will be tentative, interactive, creative, and selective - a process that occurs with the researcher moving backwards and forwards, encountering negations and transcending them.

Specifically, the ethnographer engaged in a study using a symbolic interactionist lens should always be cognizant of: the intersubjective nature of human behavior; the interpretations that the actors attach to themselves, other people and other objects with which they interact; the ways in which the actors do things on both an individual and interactive basis; the attempts that the actors make to influence (as well as accommodate and resist the inputs and behaviors of) others; the bonds that the actors develop with others over time and the ways in which they attend to these relationships; and the processes, natural histories, or sequences of interactions that the actors develop and experience over time [Prus 1996].

In short, the great advantage of the symbolic interactionist ethnography approach is that combining the theoretical strengths of the interactionist perspective with the empirical strengths of ethnography may enable the interpretive IS researcher to get much closer to the actual “human lived experience” [Prus 1996]. At the same time, it is important to note that such an approach requires the researcher to appreciate and manage the complexities of applying a theoretical lens (symbolic interactionism) to the ethnographic approach. Cognition of the intersubjective nature of human behavior requires the ethnographer to acknowledge his/her role in the construction and interpretation of participant observation, interview data and field note data. It requires attention

to reflexivity, which is often not apparent in ethnographic research, because immersion in the field is thought to deal with potential researcher effects on the data. Attending to actions which represent accommodation and resistance requires ethnographers to take account of structural features and group interaction around IT in context. Moreover, processuality and temporality assume importance in understanding sequences of interactions and relationships. Ethnography does not provide direction for incorporating particular ways of conceptualizing thick description, whereas when symbolic interactionism is used as a theoretical lens with ethnography, such considerations are necessary. In short, the research process based on such an approach must take into account the above issues, all of which are important in ensuring the trustworthiness of the study.

IMPORTANCE OF SYMBOLIC INTERACTIONIST ETHNOGRAPHY TO IS RESEARCH

While Gopal and Prasad [2000] did not specifically make use of ethnographic inquiry, their interactionist study of the group decision support systems (GDSS) phenomenon points to the great potential of leveraging the ethnographic approach in such research. Indeed, they explicitly point to the possible rich insights that may result from studying GDSS in symbolic context through *immersion* in the research setting. Similarly, Prasad [1993] notes that as a theoretical perspective, symbolic interactionism simultaneously emphasizes *process* issues in addition to the role of meaning. By employing ethnographic methods, Prasad was able to capture a rich processual view of events (pre-computerization vs. post-computerization) as they unfolded in her research setting.

On the other hand, Schlosser's [2002] interactionist study (in the *Journal of Organizational Behavior*) of wireless technology use was less successful in capturing such process issues as the researcher relied mainly on interviews instead of extended fieldwork. In fact, Schlosser acknowledged that future researchers would find value in a more extended ethnographic study (including forms of observation) which will allow for a deeper examination of the human-technology interaction (which her interview-based study did not permit).

In short, focusing on actual practice in situ while being guided by the interactionist perspective may help to facilitate the conduct of research that pursues both academic knowledge and practice-oriented insights [Rock 2001]. Such a joint pursuit is fundamental to the IS discipline [Harvey and Myers 1995] and continues to be a challenge to IS researchers, particularly with regards to the need to more keenly examine the ongoing two-way interactions between technology and the social setting [Lee 1999a, 1999b]. Specifically, prominent researchers have long been aware of the importance of symbolism when organizational and technological contexts intersect [e.g., Hirschheim and Newman 1991; Kendall and Kendall 1993; Robey and Markus 1984; Prasad 1993] but yet this very much still remains an under-researched area. In this regard, the interactionist ethnography approach can help the researcher to discern symbolic meanings in various IS contexts, the gradual sedimentation of certain of these meanings (versus the relative impermanence of others), and how such evolving meanings can lead to action [Prasad 1993].

For example, acceptance of versus resistance to the implementation of new and evolving types of information technologies are being studied with somewhat mixed results in IS literature [Lauer and Rajagopalan 2002]. In this regard, we argue that the interactionist ethnographic approach may be of help in dissecting these multi-faceted issues. This is because the use of the interactionist perspective will help to focus the researcher on the complex social interactions that result in acceptance versus resistance. The study of the original meaning/influence of existing symbols and shared meanings can help to shed light on what is most important to the people who are affected, who will be most resistant to change, and what will be most necessary to change if the project is to move forward in the new charted direction [Patton 1990]. Furthermore, the use of the ethnographic approach will enable the interactionist researcher to achieve intimate familiarity with the phenomenon as it gradually evolves in its particular social and cultural context. Specifically, when informed by symbolic interactionism, such keen observation emphasizes objects or symbols that come into play [Emerson et al., 1995]. The researcher will be able to

observe the emergence of new symbolic understandings as a result of ongoing interactions over time and how such interactions result in gradual acceptance or continuing resistance. At a practical level, such in-depth understanding may in turn allow the project sponsors to take actions as appropriate during the ongoing course of the project.

ANALYTICAL EDGE OF CONSTANT COMPARATIVE METHOD FROM GROUNDED THEORY

Grounded theory [Glaser and Strauss 1967; Strauss and Corbin 1998] shares a similarity with ethnography in having common roots in Chicago School of Sociology with its pragmatist philosophical foundations [Charmaz and Mitchell 2001]. It derives much of its theoretical underpinnings from symbolic interactionism.

Grounded theorists give priority to “generating” an inductive theory from data [Glaser, 1992]. At the actual working level, the researcher begins by coding the data in close, systematic ways so that he can generate analytic categories. He/she further elaborates and integrates these categories by making frequent comparisons across the data. Indeed, for reasons as mentioned earlier, this constant comparative method of data analysis has been “informally” adopted over time by many qualitative researchers [Merriam 1998].

IMPORTANCE OF CONSTANT COMPARATIVE ANALYSIS TO SYMBOLIC INTERACTIONIST ETHNOGRAPHY

In spite of the clear empirical strengths of the ethnographic approach, a potential problem with many such studies is getting overwhelmed by huge amounts of disconnected data, which often results in low-level description or lists of poorly integrated categories [Charmaz and Mitchell 2001]. In fact, there is a traditional concern in ethnographic research with the unsystematic nature of observational methods [Angrosino and May de Perez 2000]. Werner and Schoepfle [1987] attempt to address this concern by suggesting a typology of observation processes representing increasingly deep understanding of the setting being studied: *descriptive observation*, *focused observation*, and *selective observation*.

In this paper, we build on Werner and Schoepfle’s work by suggesting that the adaptation of the constant comparative method from grounded theory could provide the analytical edge in facilitating transitions between these three stages. The next section of the paper has a detailed example of the application of this technique, in which we demonstrate how much-needed structure and “formality” can be brought to the use of the constant comparative method in ethnographic research (in contrast to its currently “informal” use by many qualitative researchers). We argue that this “formal” adaptation of the constant comparative method may help to move the ethnographic study towards theoretical interpretation of symbolic interactions in varied IS research settings, by greatly assisting the ethnographer in focusing and structuring the data collection and analysis process [Charmaz and Mitchell 2001; Emerson et al. 1995].

At this time, it is important to reiterate that we are not advocating the incorporation of all aspects of grounded theory – in fact, we have a much more modest aim: that of incorporating the idea of constant comparisons as an enlightening approach to assist ethnographers during the process of analysis [Urquhart 2001]. Beyond this, it is not our ambition to engage the various key tenets of the grounded theory domain – an area that over the years has developed into two distinct variants, one favored by Glaser, the other by Strauss, the co-originators of the method [Melia 1996]. Indeed, there has been much controversy over the key tenets of grounded theory, with Glaser objecting strongly to many ideas in the book written by Anselm Strauss and Juliet Corbin in 1990 [Urquhart 2001]. At the same time, this book and its subsequent revised edition [Strauss and Corbin 1990, 1998] have become key readings for many PhD students aspiring to do grounded theory studies. Particularly worrying is that in the midst of such uncertainty, there is anecdotal evidence that the widespread use of grounded theory methods today includes many specious claims of its use. More importantly in the context of this paper, Urquhart [2001] notes that the aforementioned controversy obscures what is a fairly simple and useful idea for coding data: that of constant comparison. This is especially unfortunate because as mentioned earlier,

the basic premise of this method of data analysis is compatible with much of qualitative research [Merriam 1998]:

Using constant comparison method gets the analyst to the desired “conceptual power,” with ease and joy. Categories emerge upon comparison and properties emerge upon more comparison. And that is all there is to it (Glaser 1992, p.43)

III. IMPLICATIONS FOR THE LONGITUDINAL RESEARCH PROCESS

To realize the aforementioned synergies inherent in the symbolic interactionist ethnography approach, we argue that congruence needs to be achieved between the research question(s), the informing theoretical perspective, the chosen strategy of inquiry, the data collection methods used, the approach to analysis and the products of the inquiry. More particularly, the researcher must actively seek to purposefully leverage the respective strengths of using symbolic interactionism (as a theoretical perspective) and ethnography (as a strategy of inquiry) throughout the whole research process (from research design to fieldwork preparation, data collection, data analysis, and culminating in the final written account), while being fully cognizant of the ensuing criteria for ensuring trustworthiness of the study. In the rest of this paper, we provide detailed guidance for achieving such leverage.

RESEARCH DESIGN

In an interactionist ethnographic study, the research design must obviously be consistent with the ontological and epistemological assumptions of symbolic interactionism, as well as the methodological underpinnings of ethnography. As such, research questions need to be focused primarily on the symbolic and emergent aspects of the phenomena being studied and on processuality, with emphasis on the multiplicities of meaning and the role of self and identity in mediating local and shared interpretations [Gopal and Prasad 2000]. The study should, therefore, be conducted in a naturalistic field setting where behavior (human-human as well as human-IT interactions) can be observed through prolonged immersion. Such immersion will also permit the researcher to have access to multiple viewpoints.

PREPARING FOR FIELDWORK (I): TRUSTWORTHINESS CONSIDERATIONS

In qualitative research, ensuring the trustworthiness of the final account is critical. In this regard, Hammersley [1992] has described many attempts over the years to try to define criteria for conducting rigorous qualitative research. More recently, Sandelowski and Barroso [2002] observe that scholars across the social science disciplines “have sought to define what a good, valid and/or trustworthy qualitative study is . . . and to describe and codify techniques for both ensuring and recognizing good studies” but they [Sandelowski and Barroso] conclude that there remains no consensus as yet. Adding to this refrain, Rolfe [2006] argues that instead of searching for an overarching set of criteria, researchers should instead acknowledge the existence of a multiplicity of qualitative paradigms, each requiring very different approaches for judging trustworthiness. Indeed, each research study (based on a selected research methodology and as informed by a particular theoretical perspective) must be appraised on its own merits, with the implication that all published research reports should include a reflexive research diary [Rolfe 2006].

We extend the foregoing discussion by noting that the researcher-subject relationship issues of *reflexivity*, *relationality*, and *reciprocity* [Lincoln 1995] are very much pertinent to the interactionist ethnographic study. Reflexivity acknowledges the influence of investigator-participant interactions on the research process while relationality addresses power and trust relationships between participants and researchers [Hall and Callery 2001; Lincoln 1995]. On the other hand, reciprocity addresses the issue of caring and mutuality (i.e., the issue of the researcher participating in the study on reciprocating terms) [Lincoln 1995].

In an interactionist ethnographic study, due consideration of *reflexivity*, *relationality* and *reciprocity* is especially important because this approach requires the researcher to interpret “entities that themselves interpret the worlds they experience” [Prus 1996]. First, in ethnographic research, the researcher is interpreting the phenomenon based on vast amounts of data gathered during his/her immersion in the field. There is a high degree of existential engagement and ongoing socialization on the part of the researcher whose intent is to focus the spotlight on the life-worlds of the participants (Arnould 1998). However, doing this effectively requires a certain amount of constant interactional role playing on the part of the researcher, which may in turn shape what is recorded in the fieldnotes. In the symbolic interactionist view, people will also try to make sense of being studied and can thus “interact” with the researcher in widely different ways in an ethnographic study (with the possibility of thus altering the natural patterns and flow of interactions in the field). This latter point is consistent with the principles espoused by Klein and Myers [1999] relating to the importance of considering the interactions between IS researchers and subjects, and of adopting a position of suspicion during the course of the research. A position of suspicion requires consideration of power dynamics and trust relationships between researchers and participants, which may influence the construction of the data [Hall and Callery, 2001]. Therefore, in an interactionist ethnographic study, we argue that ensuring trustworthiness of the final account should be done as proactively and as transparently as possible. In support of this objective, the appropriate criteria for rigor should be clearly identified at the start of the research.

PREPARING FOR FIELDWORK (II): PROPOSED CRITERIA FOR THE INTERACTIONIST ETHNOGRAPHIC STUDY

Based on the foregoing discussion, close examination of Hammersley's arguments reveals that intertwined with due consideration of *reflexivity*, *relationality* and *reciprocity*, Lincoln and Guba's [1985] criteria may be most appropriate to govern data collection and analysis in an interactionist ethnographic study: *credibility*, *dependability*, *transferability*, and *confirmability*. Developed in response to the need to ensure rigor in a qualitative study, these criteria (and their accompanying techniques/procedures such as “prolonged engagement,” “persistent observation,” “triangulation,” “member checks,” and “providing thick description”) are rooted in the naturalistic paradigm of inquiry and have served as an effective counterbalance to traditional positivist concerns of internal validity, external validity, construct validity, and reliability. Also importantly, these criteria would ensure auditability of research decisions made and ongoing documentation of the research process, while respecting the processual nature of the interactionist ethnographic approach.

The *credibility* criterion refers to the “truth” of the findings, as viewed through the eyes of the subjects and within the context in which the research was done. *Dependability* refers to whether the results are consistent with the data collected. *Transferability* refers to the applicability of the study's findings to new contexts. Finally, the *confirmability* of a study refers to freedom from bias in the research procedure and results.

In an interactionist ethnographic study, we therefore suggest that attention be paid to the above seven criteria to ensure due consideration of researcher-subject relationships and the techniques/procedures by which data are collected and analyzed. In this regard, appropriate documentation should be proactively and transparently maintained to reflect these intertwined criteria so that the reader of the final ethnographic account can better judge the quality (trustworthiness) of the findings. Indeed, such documentation in the form of methodological, analytic, contextual and personal response information [Rodgers and Cowles 1993] should be purposefully incorporated as part of the ongoing process of writing ethnographic fieldnotes.

For example, the interactionist ethnographer should ensure that his/her fieldnotes contain appropriate *methodological* documentation to reflect evidence of “prolonged engagement,” “persistent observation,” and “triangulation.” Specifically, information should be provided about the dates, duration and nature of interviews, observations and participant-observations as well as the roles of participants who were interviewed and/or observed [Rodgers and Cowles 1993]. In addition, the documentation should describe the basis for informant selection, as well as the

social context from which the data were collected. An explicit description of rationale/decisions related to the research design and data collection process, as well as copies of transcripts and collected documents should also be provided as a chain of evidence.

The fieldnotes should also contain *analytic* documentation to record the researcher's thought processes while sorting, categorizing and comparing data, and conceptualizing patterns that emerge as the data were examined and coded. In addition, *contextual* documentation recorded in the fieldnotes will aid in eventually writing the final report. Examples are documentation, which not only describes activities and behaviors of the primary data sources, but also describes observations, events and other factors related to the context of the data collection and the actual data collection process, such as nonverbal behaviors during interviews. Such documentation will serve as contextual data while doing analysis and may eventually add significantly to the "thick description" necessary in the final reporting.

Finally, *personal response* documentation in the fieldnotes should explicitly address the issues of *reflexivity*, *relationality* and *reciprocity* [Lincoln 1995]. Specifically, the researcher's conceptualization of the original study area, his/her background or knowledge base relative to the area, his/her relationships with the participants, and his/her psychological and emotional responses to the participants and the data all need to be reflexively documented, because from a symbolic interactionist perspective, data are constructed and, as such, contribute to the study's final outcomes. In addition, such documentation should also pay due attention to ethics.

In qualitative research, ethical considerations have always been important due to the nature of relationships, with trust and power implications for researchers and participants [Angrosino and May de Perez 2000]. In interactionist ethnographic research in particular, there is a heightened concern with ethics. In fact, the role of the interactionist ethnographer is inevitably highly charged with ongoing ethical dilemmas due to the processual nature of the approach which entails a high degree of existential engagement, ongoing socialization, and interactional role-playing on the part of the researcher [Arnould 1998]. Therefore, the interactionist ethnographer needs to be reflexive with regard to ethical issues concerning researcher-subject relationships. Beyond obvious moral considerations, such a concern for ethics will eventually translate into greater trustworthiness of the study [Lincoln 1995].

In summary, trustworthiness of the interactionist ethnographic study rests not only on the auditable and documented procedures by which the data are collected and analyzed (based on the criteria of *dependability*, *credibility*, *confirmability*, and *transferability*), but also on how the researcher-subject relationship issues in terms of *reflexivity*, *relationality*, and *reciprocity* were handled during the course of the research [Lincoln 1995]. Locating oneself and documenting transparently (with the help of appropriate documentation in the fieldnotes) during the research endeavor is essential for establishing a context within which others can judge whether they can trust the findings of the study. To reiterate, such due cognizance of the identified criteria for ensuring trustworthiness of the study is needed throughout the whole research process.

CONDUCTING THE FIELDWORK (I): DATA COLLECTION

For data collection, the ethnographic approach requires that observation, participant-observation and interviews be done during lengthy immersion in the field and through the researcher's intense contact with subjects in the research setting. As mentioned previously, there is a traditional concern in ethnographic research with the unsystematic nature of observational methods, which Werner and Schoepfle [1987] attempt to address by suggesting a typology of observation processes for more systematic fieldwork: *descriptive observation*, *focused observation*, and *selective observation*.

Following Werner and Schoepfle, the ethnographic study should, therefore, be conducted by first beginning with *descriptive observation*, during which the researcher is open to everything that is going on and takes nothing for granted. In this way, the ethnographer "learns about context and content, meaning and action, structures and actors" [Charmaz and Mitchell 2001]. It is through

such broad and gradual immersion that the researcher will begin to understand what is and is not relevant to the research. Once that understanding is reached, the study would move into *focused observation* during which the researcher will conduct more focused interviews to determine meaning associated with symbols and to concentrate on emerging themes. Finally, the researcher would move into *selective observation*, during which he/she will self-consciously collect a series of incidents and interactions of the "same type" and look for regularities in them, while being open to variations from emerging patterns.

In an ethnographic study, this first-hand participatory activity is inter-connected with the concurrent process of writing fieldnotes [Emerson et al. 1995]. Writing fieldnotes involves inscriptions of witnessed events, persons and interactions, and always invokes processes of selection and presentation. This process is, therefore, a critical activity, and here, Emerson et al. [1995] provide some guidelines which are informed by the symbolic interactionist perspective. First, the interactionist ethnographer should write fieldnotes in ways that capture and preserve indigenous meanings (i.e., understanding what the participants' experiences mean to them). Second, he/she should focus on the finely-grained vivid details of interaction processes through which members of the setting create and sustain specific, local social realities. Above all, the ethnographer should reflexively document his/her own activities, circumstances, and emotional responses in the fieldnotes, as these factors may shape the process of observing and recording others' lives.

Finally, interview transcripts should preserve interactional details observed during each session. Documents (such as meeting minutes and company notices) should also be collected, as they may reflect important structural and interactional elements in the setting and possibly assist in moving a study guided by symbolic interactionism into the meso domain.

CONDUCTING THE FIELDWORK (II): DATA ANALYSIS

Since the interactionist ethnographer will end up with a huge amount of data, analytic strategies should be used from the beginning, which include regularly reviewing and developing ideas as the research progresses. In fact, analysis should pervade all phases of the research process – as the researcher undertakes data collection, records the data collected in fieldnotes and transcripts, codes the contents of these and other collected documents, detects pervasive patterns in the data, generates themes and develops relationships between them [Emerson et al. 1995]. Such ongoing analysis may, in turn, direct further data collection by raising new questions [Spradley 1979]. In short, interactionist ethnographic immersion is a longitudinal process during which the researcher constantly goes back and forth between data collection and analysis in fine-tuning his/her emerging interpretations of ongoing symbolic interactions.

In this regard, we argue that the fieldwork process can be facilitated by the adaptation of the constant comparative technique from grounded theory. Specifically, the use of constant comparative analysis may provide an analytic edge by facilitating the transitions between the aforementioned three stages (descriptive, focused and selective observation) and by placing analysis at the forefront from the inception of the research. In adapting this technique for the interactionist ethnographic approach, we draw largely on the work of Charmaz and Mitchell [2001], Emerson et al. [1995] and Locke [2001]. In particular, we note that the techniques of *open coding*, *comparing*, and *initial memo-making* related to the constant comparative method will help the ethnographer move from *descriptive* to *focused observation*, while the techniques of *focused coding*, *integrating categories* (and their properties), and *integrative memo-making* will help to move from *focused* to *selective observation*.

From Descriptive to Focused Observation

To facilitate the transition from descriptive to focused observation, we suggest the use of *open coding* [Emerson et al. 1995] as the first step in developing conceptual categories, because it raises analytic questions about the data. Subsequent data collection and coding provides ongoing checks on previous codes. By constantly engaging with and asking questions of their

data (in addition to engaging with their subjects), ethnographers begin to create the correspondence between experience and social scientific portrayals of them [Charmaz and Mitchell 2001].

Comparing occurs in tandem with coding and is critical to creating conceptual categories. Researchers compare data incidents with other data incidents, and also compare data fragments with the evolving conceptual categories. Researchers are thus always moving from examination of data incidents to create categories and back to data incidents again to test and refine categories [Locke 2001].

At the same time, writing initial memos [Emerson et al. 1995] during the initial reading of interview transcripts or fieldnotes can help to capture an idea that has been sparked by a particular incident. When subsequently developing categories, the constant comparative process may also give birth to emergent themes. *Initial memo-making* provides the ethnographer with the analytic space to play with these ideas and to check their utility by constantly going back and forth between these memos and observations in the field.

From Focused to Selective Observation

Researchers can move from focused to selective observation by conducting fieldwork with the aim of *integrating categories* through full development of conceptual categories and their relationships. At this point, there is a slight shift in the coding and comparative activities. First, conceptual categories should be further articulated so that they can account for both similarity and variation in the exemplifying data incidents [Locke 2001]. This can be done through the use of *focused coding* [Emerson et al. 1995]. Rather than focusing on comparing data incidents to each other, efforts should now be focused on comparing data incidents to conceptual categories and thinking about their properties or dimensions.

In order to arrange categories so that they begin to add up to a conceptual “whole” (a conceptual framework or a set of coherent, emergent themes), the conceptual elements should be compared in order to clarify the relationships between the categories and their properties. At this stage, *integrative memo-making* [Emerson et al. 1995] can support the researcher’s efforts to articulate the significance of the categories and to begin working out the relationships between the analytic elements [Locke 2001].

From Selective Observation to the final Ethnographic Account

As categories and their relationships are developed, the use of the comparative process will help in finalizing the boundaries of conceptual development at two levels. At the level of the framework, the researcher makes decisions about “conceptual reduction,” thereby choosing what to include and what to ignore when composing a particular story from the data. At the level of the categories, this conceptual reduction will help the researcher to focus on the more relevant and robust categories, and to drop less central categories from the framework [Locke 2001]. Memos produced at earlier stages will offer the theoretical substance for the ethnographic account, in terms of providing both the content for the categories and a way to frame the written presentation [Locke 2001].

An Analytical Edge in Addition to Ethnography’s Empirical Strengths

In summary, the emphasis of the constant comparative method on active coding has advantages for ethnographic research. Ethnographers can see and connect actions and contexts early in their studies, because constant comparisons will lead ethnographers to compare data with data (and with emerging categories) from the beginning of data collection, instead of waiting till all the data are in. Subsequently, ongoing active coding and constant comparing enable ethnographers to show how categories are connected in a larger, overall framework [Charmaz and Mitchell 2001]. However, the various steps above must not be forced upon the data. Instead, timely movement between the three stages (descriptive, focused, and selective observation) is

dependent on the researcher allowing the categories to gradually emerge from the data, as part of his/her ongoing immersion in the setting.

Therefore, without losing any of the advantages of rich ethnographic immersion, the constant comparative method provides the analytical edge to help the ethnographer move towards theoretical interpretation of symbolic interactions in the research setting.

THE FINAL INTERACTIONIST ETHNOGRAPHY ACCOUNT: BEYOND THICK DESCRIPTION

In concert with the need for “thick description” [Geertz 1973], Golden-Biddle and Locke [1993] identify three important criteria for high quality ethnographic writing: authenticity (demonstrate that the researcher was indeed immersed in the field), plausibility (present the findings as relevant to the common concerns of the audience) and criticality (move the readers to reexamine their own taken-for-granted assumptions).

In an interactionist ethnographic study, the combination of symbolic interactionism as a theoretical perspective and ethnography as a strategy of inquiry imply that the findings should begin as thick description in which the researcher describes and analyzes symbolic forms and interactions – words, images, institutions, behaviors – with respect to one another and to the whole that they comprise. However, when an ethnographic study is guided by the interactionist perspective, the final account should move beyond thick description to embrace processual or temporal aspects of the phenomenon. This is because symbolic interactionism embodies a kind of general theory as to the nature of the causes that produce the complex forms of social behavior under study [Lindesmith 1992]. Specifically, the cause of a complex IS phenomenon (as is the case for many social phenomena) is not a condition, variable, thing or event but, in fact, is a set of interactional processes which in their later stages produce or become the effect [Dewey 1938]. Indeed, Lindesmith [1992] ventures that “what is called effect and what is called cause depends upon the particular stage or aspect of the total process that is taken as the problem.”

A “moving” thick description (that incorporates processuality and/or temporality while offering rich insights) will therefore do greater justice to the strengths of the interactionist ethnographic approach – a good example of such an account that goes beyond descriptive detail is that of Mandell [1992] which indicates how little children gradually move from private meanings to publicly shared understandings of involvement objects. In the IS context, such processuality is especially important since the interactionist researcher needs to focus not only on human-to-human interactions but also on two-way human-IT interactions, in keeping with the socially constituted nature of information technology [Orlikowski 1992; Orlikowski and Robey 1991].

Finally, we have previously discussed how the researcher’s “filters” may come into play during data collection and analysis. In order to be reflexive about such “filters,” the author should transparently demonstrate in the final account how the various criteria for proactively ensuring trustworthiness were incorporated in the study. In this regard, the various documentation logs (methodological, analytic, contextual, and personal response) maintained during the course of the research will prove useful as a basis for such reflexivity.

Although not an interactionist study, Schultze’s [2000] confessional account of her ethnography about IT-related knowledge work is a compelling example of how reflexivity can be appropriately applied in IS research. In particular, she assesses the trustworthiness of her own study based on a selected set of criteria. Though not ethnographic studies, Gopal and Prasad [2000] and Walsham and Sahay [1999] have likewise transparently assessed the trustworthiness of their GDSS and GIS research respectively; this allows readers to judge the degree to which they can trust the findings.

IV. CONCLUSION

Over the years, the role of information technology has become increasingly complex as it has become a key enabler of social change that shapes new forms of practices and communities,

while interacting with the economic, technical and social environments in organizations. Compounding this situation is the seemingly incessant trail of new technologies as well as new functionalities being added on to existing technologies, and the extensive integration and inter-linkage between such technologies and people. In other words, many IS phenomena are increasing in complexity as well as fluidity, with the need to focus on intricate human-to-human and human-IT interactions. As such, today's IS researchers face a heavy intellectual responsibility to dissect such phenomena incisively and in a timely manner so as to stay relevant to the needs of the industry.

Against this backdrop, this paper's contribution lies in our exposition of how the inherent strengths of the interpretivist paradigm can be further leveraged to address increasingly complex IS phenomena. Specifically, we suggest moving beyond theoretical and methodological pluralism to purposefully leverage the respective strengths of the informing theoretical perspective and the chosen strategy of inquiry. This is based on our observation that there has been little discussion in IS literature on how interpretive researchers can effectively combine these strengths during the course of such a study. In particular, we note that IS researchers have not adequately highlighted the implications of using a theoretical lens with a particular methodology in terms of their impact on all aspects of the research process. Considering the increasing complexity of IS phenomena, such a gap in the IS research methods literature needs to be addressed.

In support of our argument about the importance of addressing this gap, we use the symbolic interactionist ethnography approach as an example in this paper. This pertinent example is purposefully chosen because in IS literature, prominent researchers have long recognized the importance of symbolism when organizational and technological contexts intersect but yet this very much still remains an under-researched area. Specifically, we demonstrate that when an ethnographic study is guided by a symbolic interactionist theoretical lens, the empirical strengths of ethnography can complement the theoretical strengths of the interactionist perspective, by providing a platform for the researcher to understand the complex, fluid and longitudinal dynamics that emerge from the two-way interactions between technology and the social setting. In particular, we show how the interactionist perspective and the ethnographic approach can enrich the research process from the inception of the study to fieldwork preparation, data collection, data analysis and writing the final account. At the same time, we explicate how the analytical edge of constant comparative analysis can enhance such leverage during the fieldwork process.

In our fervor for rich contextual insights, it is paramount that researchers continue to maintain focus on ensuring the trustworthiness of their interpretive studies. In our "walk-through" example of the interactionist ethnographic approach, we have attempted to highlight the importance of a common theoretical-methodological thread for due consideration of rigor throughout the whole research process – this is done by constantly linking the written (ethnography) account and the (ethnographic) strategy/process of inquiry to its informing (symbolic interactionism) theoretical perspective. In this regard, we suggest attending to seven intertwined criteria for proactively and transparently enhancing the trustworthiness of the interactionist ethnographic study: *credibility*, *dependability*, *transferability*, *confirmability*, *reflexivity*, *relationality*, and *reciprocity*. These criteria would ensure explicit consideration not only of the techniques/procedures by which data are collected and analyzed, but also of the impact of researcher-subject relationships during the course of the study.

In closing, this paper is intended to provide a starting point for interested IS researchers to contemplate the applicability of such leverage for other combinations of theoretical perspectives and strategies of inquiry. For example, we have used Schlosser's [2002] study to highlight how symbolic interactionism may be incompatible with a strategy of inquiry that is solely interview-based. Indeed, such a strategy of inquiry may be at odds with a basic premise of the theoretical perspective. As such, it would be interesting to explore other combinations so as to ascertain whether such leverage would be of great value or conversely, whether incompatibility between the theoretical perspective and the strategy of inquiry would undermine the trustworthiness of the resulting study. In short, we urge renewed introspection in interpretive IS research – and at this particularly important juncture in the development of the IS discipline.

REFERENCES

- Angrosino, M. V. and R.A. May de Perez. (2000). "Rethinking Observation from Method to Context," in N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of Qualitative Research (2nd ed.)*. Thousand Oaks, CA: Sage.
- Arnould, E. J. (1998). "Ethical Concerns in Participant Observation/Ethnography," *Advances in Consumer Research*. 25.
- Baskerville, R. and M. Myers. (2002). "Information Systems as a Reference Discipline," *MIS Quarterly*. 26(1).
- Behar, R. (1996). *The Vulnerable Observer: Anthropology That Breaks Your Heart*. Boston: Beacon Press.
- Blumer, H. (1998). *Symbolic Interactionism: Perspective and Method (renewed ed.)*. Englewood Cliffs, NJ: Prentice-Hall.
- Blumer, H. (1997). "Foreword to L. Athens," *Violent Criminal Acts and Actors Revisited*. Urbana, IL: University of Illinois Press.
- Brissy, J. F. (1990). "Computers in Organizations: The (White) Magic of the Black Box," in B. Turner (Ed.), *Organizational Symbolism*. Walter de Gruyter.
- Charmaz, K. and R. G. Mitchell. (2001). "Grounded Theory in Ethnography," in P. Atkinson, A. Coffey, S. Delamont, and J. Lofland (Eds.), *Handbook of Ethnography*. London: Sage.
- Chia, R. (1998). "From Complexity Science to Complex Thinking: Organization as Simple Location," *Organization*. 5, pp. 341-369.
- Davies, L. J. (1991). "Researching the Organisational Culture Contexts of Information Systems Strategy," in Nissen, H. E., Klein, H. K. and Hirschheim. R. (eds.), *Information Systems Research in the 1990s*. Amsterdam, Elsevier/North Holland.
- Davies, L. J. and S. Nielsen. (1992). "An Ethnographic Study of Configuration Management and Documentation Practices in an Information Technology Centre," in Kendall, K. E., Lyytinen, K. and De Gross, J. (eds.), *The Impact of Computer Supported Technology on Information Systems Development*. Amsterdam, Elsevier/North Holland.
- Dewey, J. (1938). *Logic: The Theory of Inquiry*. New York: Henry Holt and Company.
- Emerson, R. M., R. I. Fretz, and L. L. Shaw. (1995). *Writing Ethnographic Fieldnotes*. University of Chicago Press.
- Geertz, C. (1973). *The Interpretation of Cultures*. New York: Basic Books.
- Glaser, B. G. (1992). *Basics of Grounded Theory Analysis: Emergence vs. Forcing*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. and A. L. Strauss. (1967). *The Discovery of Grounded Theory*. Chicago:Aldine.
- Golden-Biddle, K. and K. Locke. (1993). "Appealing Work: An Investigation of How Ethnographic Texts Convince," *Organization Science*. 4(4).
- Gopal, A. and P. Prasad. (2000). "Understanding GDSS in Symbolic Context: Shifting the Focus from Technology to Interaction," *MIS Quarterly*. 24(3).
- Guba, E. G. and Y. S. Lincoln. (1994). "Competing Paradigms in Qualitative Research," in N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of Qualitative Research*. Newbury Park: Sage.

- Hall, P. M. (1987). "Interactionism and the Study of Social Organization," *The Sociological Quarterly*. 28(6).
- Hall, W. A. and P. Callery. (2001). "Enhancing the Rigor of Grounded Theory: Incorporating Reflexivity and Relationality," *Qualitative Health Research*. 11(2).
- Hammersley, M. (1992). *What's Wrong with Ethnography? Methodological Explorations*. London: Routledge.
- Harvey, L. and M. D. Myers. (1995). "Scholarship and Practice: The Contribution of Ethnographic Research Methods to Bridging the Gap," *Information Technology & People*. 8(3).
- Hirschheim, R. and M. Newman. (1991). "Symbolism and Information Systems Development: Myth, Metaphor and Magic," *Information Systems Research*. 2(1).
- Holzblatt, K. and H. Beyer. (1993). "Making Customer-Centered Design Work for Teams," *Communications of the ACM*. 36(10), pp. 93-103.
- Hughes, J. A., D. Randall, and D. Shapiro. (1992). "Faltering from Ethnography to Design," *ACM 1992 Conference on Computer-Supported Cooperative Work: Sharing Perspectives*. pp. 115-123.
- Introna, L. D. (1997). *Management, Information and Power*. Macmillan.
- Kendall, J. E. and K. E. Kendall. (1993). "Metaphors and Methodologies: Living beyond the Systems Machine," *MIS Quarterly*. 17(2).
- Katerattanakul, P., B. Han, and A. Rea. (2006). "Is Information Systems a Reference Discipline?" *Communications of the ACM*. 49(5).
- Klein, H. K. and M. D. Myers. (1999). "[A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems](#)," *MIS Quarterly*. Special Issue on Intensive Research, 23(1).
- Landry, M. and C. Banville. (1992). "A Disciplined Methodological Pluralism for MIS Research," *Accounting, Management and Information Technologies*. 2(2).
- Lauer, T. and B. Rajagopalan. (2002). "Examining the Relationship between Acceptance and Resistance in System Implementation," *Proceedings of the Eighth Americas Conference on Information Systems*. Dallas, Texas, August 9-11.
- LeCompte, M. D. and J. J. Schensul. (1999). *Designing and Conducting Ethnographic Research*. Walnut Creek, CA: AltaMira Press.
- Lee, A. S. (1999a). "The MIS Field, the Publication Process, and the Future Course of MIS Quarterly," *MIS Quarterly*. 23(1), pp. v-x.
- Lee, A. S. (1999b). "Rigor and Relevance in MIS Research: Beyond the Approach of Positivism Alone," *MIS Quarterly*. 23(1).
- Lewis, I. M. (1985). *Social Anthropology in Perspective*. Cambridge: Cambridge University Press.
- Lincoln, Y. S. (1995). "Emerging Criteria for Quality in Qualitative and Interpretive Research," *Qualitative Inquiry*. 1(3).
- Lincoln, Y. S. and E. Guba. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage.
- Lindesmith, A. R. (1992). "Symbolic Interactionism and Causality," in J. Johnson, H. A. Farberman and G. A. Fine (Eds.), *The Cutting Edge: Advanced Interactionist Theory*: 255-265. Greenwich, CT: JAI Press.

- Locke, K. (2001). *Grounded Theory in Management Research*. Sage.
- Maines, D. (1977). "Social Organization and Social Structure in Symbolic Interactionist Thought," *Annual Review of Sociology*. 3.
- Mandell, N. (1992). "Children's Negotiation of Meaning," in G. A. Fine, J. Johnson and H. A. Farberman (Eds.), *Sociological Slices: Introductory Readings from the Interactionist Perspective*. Greenwich, CT: JAI Press.
- Markus, M. L. and D. Robey. (1988). "Information Technology and Organizational Change: Causal Structure in Theory and Research," *Management Science*. 34(5).
- Mead, G. H. (1934). *Mind, Self and Society*. Chicago: University of Chicago Press.
- Melia, K. M. (1996). "Rediscovering Glaser," *Qualitative Health Research*. 6(3). CA: Sage.
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass Publishers.
- Merton, R. K. (1996). *On Social Structure and Science*. University of Chicago Press.
- Myers, M. D. (1999). "Investigating Information Systems with Ethnographic Research," *Communication of the AIS*. 2.
- Ngwenyama, O. K. and A. S. Lee. (1997). "Communication Richness in Electronic Mail: Critical Social Theory and the Contextuality of Meaning," *MIS Quarterly*. 17(2).
- Orlikowski, W. J. (1991). "Integrated Information Environment or Matrix of Control? The Contradictory Implications of Information Technology," *Accounting, Management and Information Technologies*.1(1), pp. 9-42.
- Orlikowski, W. J. (1992). "The Duality of Technology: Rethinking the Concept of Technology in Organizations," *Organization Science*. 3(3).
- Orlikowski, W. J. and J. J. Baroudi. (1991). "Studying Information Technology in Organizations: Research Approaches and Assumptions," *Information Systems Research*. 2.
- Orlikowski, W.J. and D. Robey. (1991). "Information Technology and the Structuring of Organizations," *Information Systems Research*. 2(2).
- Patton, M. Q. (1990). *Qualitative Evaluation and Research Methods*. (2nd ed.). Newbury Park: Sage.
- Prasad, P. (1993). "Symbolic Processes in the Implementation of Technological Change: A Symbolic Interactionist Study of Work Computerization," *Academy of Management Journal*. 36(6).
- Prasad, P. (1997). "Systems of Meaning: Ethnography as a Methodology for the Study of Information Technologies," in A. S. Lee, J. Liebenau and J. I. DeGross (Eds.), *Information Systems and Qualitative Research*. London: Chapman and Hall.
- Preston, A. M. (1991). "The 'Problem' in and of Management Information Systems," *Accounting, Management and Information Technologies*. 1(1), pp. 43-69.
- Prus, R. (1996). *Symbolic Interaction and Ethnographic Research*. Albany: State University of New York Press.
- Reynolds, L. T. (1990). *Interactionism: Exposition and Critique* (2nd ed.). New York: General Hall.

- Robey, D. and M. Boudreau. (1999). "Accounting for the Contradictory Organisational Consequences of Information Technology: Theoretical Directions and Methodological Implications," *Information Systems Research*.10(2).
- Robey, D. and M. L. Markus. (1984). "Rituals in Information System Design," *MIS Quarterly*. 8(1).
- Rock. P. (2001). "Symbolic Interactionism and Ethnography," in P. Atkinson, A. Coffey, S. Delamont, P. Lofland, and L. Lofland (Eds.), *Handbook of Ethnography*. London: Sage.
- Rodgers, B. L. and K. B. Cowles. (1993). "The Qualitative Research Audit Trail: A Complex Collection of Documentation," in *Research in Nursing and Health*. 16.
- Rolland, K. H. and J. Herstad. (2000). "The 'Critical Case' in Information Systems Research," Proceedings of the Twenty-Third Information Systems Research Seminar in Scandinavia (IRIS 2000), August 12-15, Sweden.
- Rolfe, G. (2006). "Validity, Trustworthiness and Rigour: Quality and the Idea of Qualitative Research," *Journal of Advanced Nursing*. 53(3), pp. 304-310.
- Samuels, W. J. (1997). "The Case for Methodological Pluralism," in A. Salanti and E. Screpanti (Eds.), *Pluralism in Economics: New Perspectives in History and Methodology*. Edward Elgar.
- Sandelowski, M. and J. Barroso. (2002). "Reading Qualitative Studies," *International Journal of Qualitative Methods*. 1(1), Article 5.
- Sato, I. (1992). "Play Theory of Delinquency: Toward a General Theory of "Action," in G. A. Fine, J. Johnson and H. A. Farberman (Eds.), *Sociological Slices: Introductory Readings from the Interactionist Perspective*. Greenwich, CT: JAI Press.
- Schlosser, F. K. (2002). "So, How Do People Really Use Their Handheld Devices? An Interactive Study of Wireless Technology Use," *Journal of Organizational Behavior*. 23(4).
- Schultze, U. (2000). "A Confessional Account of an Ethnography about Knowledge Work," *MIS Quarterly*. 24(1).
- Schultze, U. (2001). "Reflexive Ethnography in Information Systems Research," in E. M. Trauth (Ed.), *Qualitative Research in IS*. Idea Group Publishing.
- Spradley, J. (1979). *The Ethnographic Interview*. New York: Holt, Rinehart & Winston.
- Staw, B. (1985). "Spinning on Symbolism: A Brief Note on the Future of Symbolism in Organizational Research," *Journal of Management*. 11(2).
- Strauss, A. and J. Corbin. (1990). *Basics of Qualitative Research*. CA: Sage.
- Strauss, A. and J. Corbin. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory (2nd ed.)*. CA: Sage.
- Stryker, S. (1981). "Symbolic Interactionism: Themes and Variations," in M. Rosenberg and R. Turner (Eds.), *Social Psychology*. New York: Basic Books.
- Swan, J. E. and M. R. Bowers. (1998). "Services Quality and Satisfaction: The Process of People Doing Things Together," *Journal of Services Marketing*. 12(1).
- Turkle, S. (1984). *The Second Self: Computers and the Human Spirit*. New York: Simon & Schuster.
- Turner, B. A. (Ed.) (1990). *Organizational Symbolism*. Berlin: Walter de Gruyter.

Urquhart, C. (2001). "An Encounter with Grounded Theory: Tackling the Practical and Philosophical Issues," in E. M. Trauth (Ed.), *Qualitative Research in IS: Issues and Trends*. Hershey, PA: Idea Group Publishing.

Van Maanen, J. (1988). *Tales of the Field: On Writing Ethnography*. Chicago: University of Chicago Press.

Walsham, G. (1995). "The Emergence of Interpretivism in IS Research," *Information Systems Research*. 6(4).

Walsham, G. and S. Sahay. (1999). "GIS for District-Level Administration in India: Problems and Opportunities," *MIS Quarterly*. 23(1).

Werner, O. and G. M. Schoepfle. (1987). *Systematic Fieldwork: Vol. 1. Foundations of Ethnography and Interviewing*. Newbury Park, CA: Sage.

Whyte, W. F. (1943). *Street Corner Society*. Chicago: University of Chicago Press.

ABOUT THE AUTHORS

Michael Tan is an assistant professor of Information Systems at the University of Nevada, Reno. He received his Ph.D. in Information Systems from the National University of Singapore. With an industry background in IT management and IT consulting, his research is focused on enterprise systems, inter-enterprise systems and qualitative methodologies.

Wendy Hall is an associate professor of Nursing at the University of British Columbia in Vancouver, British Columbia, Canada. She received her Ph.D. in Nursing from the University of Manchester, Manchester, England. Dr. Hall is interested in exploring implications of application of theoretical frameworks and new criteria for rigor to qualitative methods. Her research is focused on the transition to parenthood. She has published methodological pieces in the journal of Qualitative Health Research and her studies about the transition to parenthood in a number of top-ranked nursing journals, such as Journal of Advanced Nursing.

Copyright © 2007 by the Association for Information Systems. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and full citation on the first page. Copyright for components of this work owned by others than the Association for Information Systems must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers, or to redistribute to lists requires prior specific permission and/or fee. Request permission to publish from: AIS Administrative Office, P.O. Box 2712 Atlanta, GA, 30301-2712 Attn: Reprints or via e-mail from ais@aisnet.org



Communications of the Association for Information Systems

ISSN: 1529-3181

EDITOR-IN-CHIEF

Joey F. George
Florida State University

AIS SENIOR EDITORIAL BOARD

Jane Webster Vice President Publications Queen's University	Joey F. George Editor, CAIS Florida State University	Kalle Lyytinen Editor, JAIS Case Western Reserve University
Edward A. Stohr Editor-at-Large Stevens Inst. of Technology	Blake Ives Editor, Electronic Publications University of Houston	Paul Gray Founding Editor, CAIS Claremont Graduate University

CAIS ADVISORY BOARD

Gordon Davis University of Minnesota	Ken Kraemer Univ. of Calif. at Irvine	M. Lynne Markus Bentley College	Richard Mason Southern Methodist Univ.
Jay Nunamaker University of Arizona	Henk Sol Delft University	Ralph Sprague University of Hawaii	Hugh J. Watson University of Georgia

CAIS SENIOR EDITORS

Steve Alter U. of San Francisco	Jane Fedorowicz Bentley College	Chris Holland Manchester Bus. School	Jerry Luftman Stevens Inst. of Tech.
------------------------------------	------------------------------------	---	---

CAIS EDITORIAL BOARD

Erran Carmel American University	Fred Davis Uof Arkansas, Fayetteville	Gurpreet Dhillon Virginia Commonwealth U	Evan Duggan U of Alabama
Ali Farhoomand University of Hong Kong	Robert L. Glass Computing Trends	Sy Goodman Ga. Inst. of Technology	Ake Gronlund University of Umea
Ruth Guthrie California State Univ.	Alan Hevner Univ. of South Florida	Juhani Iivari Univ. of Oulu	K.D. Joshi Washington St Univ.
Michel Kalika U. of Paris Dauphine	Jae-Nam Lee Korea University	Claudia Loebbecke University of Cologne	Paul Benjamin Lowry Brigham Young Univ.
Sal March Vanderbilt University	Don McCubbrey University of Denver	Michael Myers University of Auckland	Fred Niederman St. Louis University
Shan Ling Pan Natl. U. of Singapore	Kelley Rainer Auburn University	Paul Tallon Boston College	Thompson Teo Natl. U. of Singapore
Craig Tyran W Washington Univ.	Upkar Varshney Georgia State Univ.	Chelley Vician Michigan Tech Univ.	Rolf Wigand U. Arkansas, Little Rock
Vance Wilson U. Wisconsin, Milwaukee	Peter Wolcott U. of Nebraska-Omaha	Ping Zhang Syracuse University	

DEPARTMENTS

Global Diffusion of the Internet. Editors: Peter Wolcott and Sy Goodman	Information Technology and Systems. Editors: Alan Hevner and Sal March
Papers in French Editor: Michel Kalika	Information Systems and Healthcare Editor: Vance Wilson

ADMINISTRATIVE PERSONNEL

Eph McLean AIS, Executive Director Georgia State University	Chris Furner CAIS Managing Editor Florida State Univ.	Copyediting by Carlisle Publishing Services
---	---	--