



Learning from First-Generation Qualitative Approaches in the IS Discipline: An Evolutionary View and Some Implications for Authors and Evaluators (Part 2/2)

Suprateek Sarker¹, Xiao Xiao², Tanya Beaulieu³, Allen S. Lee⁴

¹University of Virginia, U.S.A., suprateek.sarker@comm.virginia.edu

²Copenhagen Business School, Denmark, xx.digi@cbs.dk

³Utah State University, U.S.A., tanya.beaulieu@usu.edu

⁴Virginia Commonwealth University, U.S.A., aslee@vcu.edu

Abstract

Qualitative research in the information systems (IS) discipline has come a long way, from being dismissed as “exploratory research” or “preresearch,” not worthy of being featured in “scientific” and authoritative journals in the discipline, to a state where such research is seen as legitimate and even welcome within much of the mainstream IS research community. Recent editorials have expressed concerns regarding the research community’s lack of awareness about the diverse nature of qualitative research and the apparent confusion regarding how these diverse approaches are different. In this two-part editorial, Part 1 focused on analyzing first-generation qualitative research approaches based on four key elements (theory, data, analysis, and claims), and discussed how each of these elements might vary depending on the type (i.e., genre) of the qualitative study. In Part 2, we examine qualitative studies published over the past 17 years in four leading journals for evidence related to the genres identified in Part 1 of this editorial. Specifically, our goal was to assess the recognition of various genres in the published papers, and to determine whether there was sufficient internal consistency for a given genre within each paper. Based on the results of the assessment, we offer lessons for authors, reviewers, and editors.

Keywords: Research Methodology, Qualitative Research, Research Genres, Case Study Research, Positivism, Interpretivism, Grounded Theory, Hermeneutics, Ethnography, Information Systems Discipline, Methodology References

Carol Saunders was the accepting editor.

1 Introduction

In this two-part editorial, we provide a critical commentary regarding the state of qualitative research within the Information Systems (IS) discipline. We have two objectives: (1) to offer an understanding of why the mismatch of methodological expectations might occur (Part 1), and (2) to assess, based on actual publications in four leading mainstream disciplinary journals, whether or not the genres identified are actually recognized by

authors, and whether the differences between the genres are enacted by authors in practice (Part 2).

Part 1 of this editorial (Sarker, Xiao, Beaulieu, & Lee, 2018) began with an evolutionary view to reconstruct how qualitative research has evolved over time. We focused on “first-generation”¹ qualitative research

¹ We use the term “first generation” to refer to those qualitative approaches that have long been established within the discipline, such as exploratory case study,

approaches in order to gain a historical perspective. Summarizing from Part 1, many of our leading journals appear to be enacting patterns of the control phase where the expectation of adherence to a wide range of criteria, whether implicit or explicit (and sometimes contradictory!) has become the norm.

To better understand this state of affairs, in Part 1 of this editorial, we decomposed qualitative research

positivist case study, interpretive case study, grounded theory methodology, ethnography, and hermeneutics.

into four core elements—the conception and use of data, the nature and role of theory, data analysis strategies, and the nature of claims about findings. Next, we mapped the four elements to the different types (i.e., “genres”) of qualitative approaches. As noted in Part 1, the use of the term genre “recognizes the fact that each approach is associated with a set of assumptions, a style of inquiry and representation, a certain set of methodological guidelines and methodologists, and, consequently, expectations of what constitutes internal consistency, from a methodological standpoint” (p. 757). Finally, Part 1 offered sample evaluation criteria and references appropriate to each research genre (Figure 1).

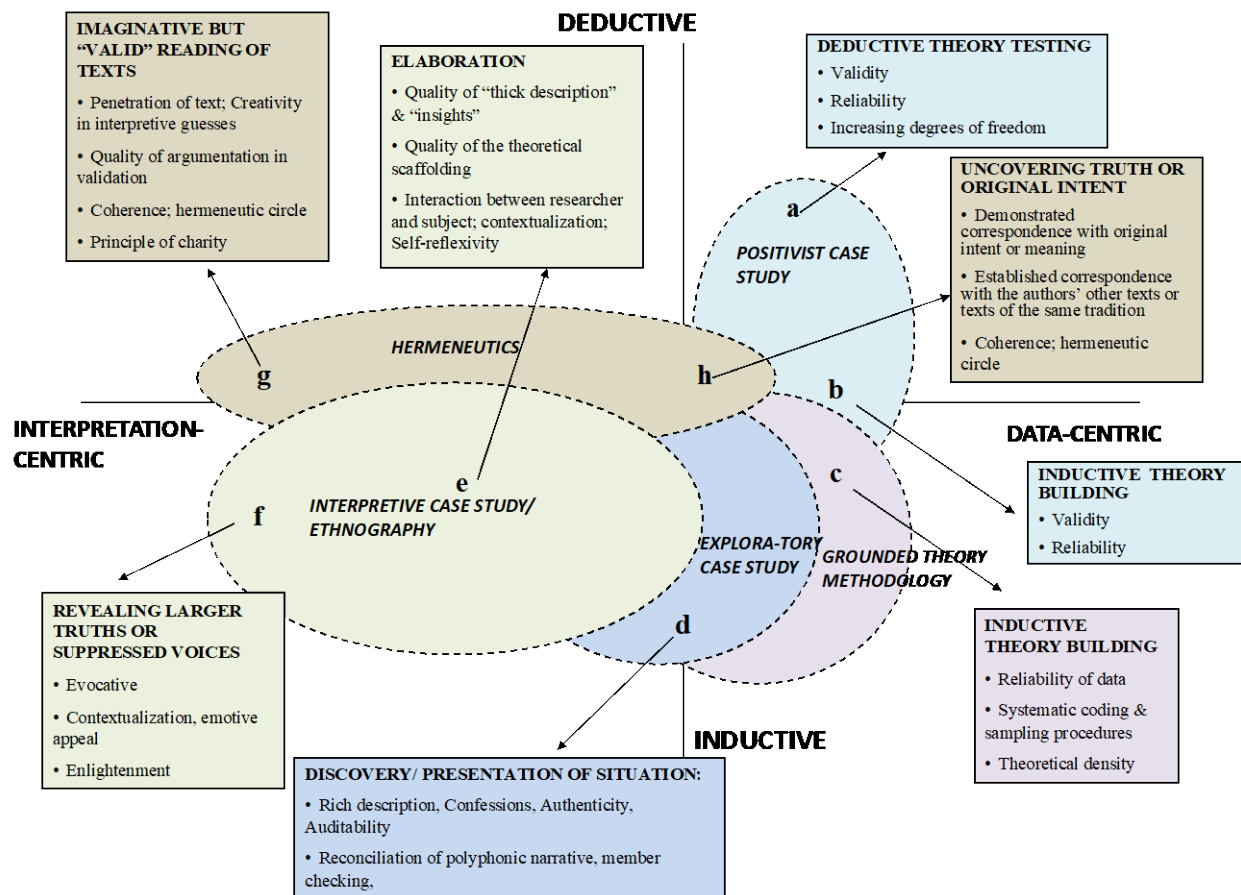


Figure 1. Genres and Sample Evaluation Criteria at Different Points on the Map

Having established the different qualitative genres and their evaluation criteria, naturally, some questions come to mind:

Is there evidence that authors, reviewers, and/or editors in the IS community are aware of these different genres?

If so, to what extent does work featured in IS journals maintain internal consistency within each genre?

We spend the remaining portion of this editorial addressing these two questions. First, we examine qualitative research articles in four leading IS journals for evidence regarding the recognition of different genres and the differences across them. Based on our analysis, we draw lessons learned from the study of first-generation approaches to inform and facilitate the discipline’s move toward second-generation qualitative research approaches (and beyond).

2 Assessment of Qualitative Research in the IS Discipline

In order to assess the current state of IS research regarding these questions, we reviewed qualitative research articles published between 2001 and 2017 in four leading mainstream IS journals—*MIS Quarterly* (MISQ), *Information Systems Research* (ISR), *Journal of Management Information Systems* (JMIS), and *Journal of the Association for Information Systems* (JAIS).² Due to the variety of terms and keywords used in the qualitative domain, a keyword search was not used to identify relevant papers; instead, *all* empirical research articles within this time period were reviewed, and an article was selected if its methodology was predominantly qualitative. We identified a total of 199 qualitative research articles across the four journals. As a first step, we examined each article and noted whether (a) an explicit qualitative research genre was specified, (b) a genre was not explicitly stated, but was implied and easily identifiable, or (c) a genre was simply not identifiable. To address our second question, that is, to determine whether the documented research process was internally consistent within the stated genre, we evaluated the referenced methodologist(s) within each paper. Given that methodologists/references are often associated with a certain methodological focus and genre, we believe that the study of methodologists/references invoked is a reasonable, even if imperfect, way to assess internal consistency. Appendix A provides further details relating to how each article was coded.

2.1 Analysis of Genres Claimed

We were able to identify genres being adopted with reasonable precision in only 124 of the 199 research articles examined. These 124 studies could be identified either because: (a) they explicitly used a recognizable genre label, such as “interpretive case study” to describe their methodological approach (94 articles), or (b) a genre was implicitly stated based on a clearly specified epistemological and ontological stance and research conducted in accordance with a

² The papers included in this review are part of a database related to an ongoing research project in qualitative research within the IS discipline. Mixed method papers, SIM “Best Papers” from earlier MISQ issues, action research, and design research papers are excluded from this review. These four journals (MISQ, ISR, JMIS, and JAIS) were chosen because they are globally recognized as being among the leading journals of the discipline, and more importantly, they have *no stated or enacted preference for qualitative research*, unlike excellent journals such as I&O, JSIS, EJIS, JIT, ISJ, and IT&P.

specific genre (30 articles). We first discuss the 124 papers with an identifiable genre by providing analysis regarding the internal consistency of these papers. It was problematic to provide an analysis of internal coherence for the remaining 75 papers given that the lack of any distinct genre resulted in an absence of a clear set of criteria which could be used to evaluate these articles.

2.2 Papers with an Identified Genre

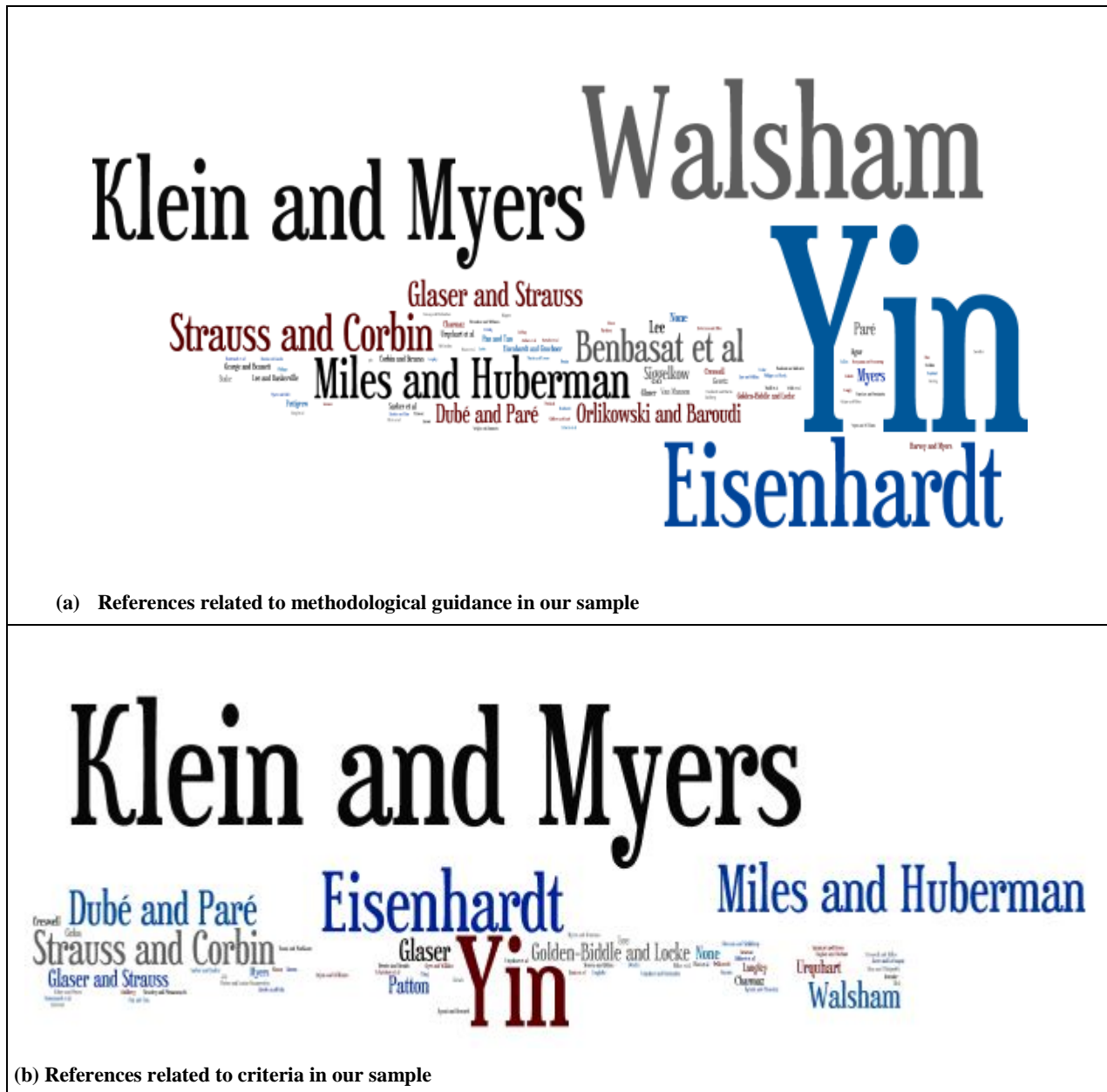
In this section, we analyze the internal consistency of the set of articles associated with a specific genre. As mentioned above, one method of judging internal consistency is to analyze the use of methodological references. For example, we would expect a paper that claims to be using grounded theory to be conducted in accordance with methodologists such as Glaser and Strauss, Strauss and Corbin, Charmaz, Urquhart et al., etc. Likewise, a positivist case study might cite Yin, Eisenhardt, Benbasat et al., Lee, or Dubé and Paré, given that these methodologists’ epistemological and ontological assumptions align with assumptions underlying positivist case studies. Indeed, it would be questionable for a positivist case study paper to be methodologically guided by say, Walsham (1995; 2006), and/or by Klein and Myers (1999), given that these methodological references are associated with interpretive (case) studies.

For each of the articles with an identified genre, we collected (a) the methodological references, and (b) the criteria references contained within each article. The methodological references consisted of the methodologist(s) whose work appeared to have *guided* the focal study’s research process, while the criteria references offered yardsticks for justifying methodological aspects of the study and for judging/establishing the quality of the study (see Appendix A).

We next created a tagcloud³ for all 199 articles, in order to present, for reference, an overall view of qualitative research within the IS discipline (see Table 1). Table 1 shows that the dominant methodological references for qualitative research in IS include the works of Yin, Walsham, Eisenhardt, Klein and Myers, Miles and Huberman, and Strauss and Corbin; the dominant criteria references include Klein and Myers, Yin, Eisenhardt, Miles and Huberman, and Strauss and Corbin.

³ A tagcloud is a graphical representation which gives higher prominence to items that occur more frequently in a set of items and provides an easy visualization technique to understand the content of a set of text (e.g., Chen, Chiang, & Storey, 2012).

Table 1. References Related to Methodological Guidance and Criteria for All Qualitative Articles Reviewed



Next, tagclouds were created from the methodological and the criteria references used within the set of papers associated with each genre (see Table 2). So, if the papers within a genre have internal methodological consistency, we would expect its tagcloud to be dominated by those methodological references normatively associated with that genre. It should be noted that the genre of hermeneutics is not included in Table 2 as part of our assessment because

only one article (in the set of 124 articles) was found to have adopted the hermeneutics approach⁴. We next turn to a discussion on the internal consistency within each genre.

⁴ This study drew on cultural hermeneutics as a theoretical lens (Geertz, 1983), and briefly referred to Ricoeur (1976) in the analysis.

Table 2. Tagclouds of References Related to Methodological Guidance and Criteria (by Genre) in Articles Reviewed

Genre	References related to methodological guidance	References related to criteria
Positivist case studies	<p>Yin, Eisenhardt, Paré, Miles and Huberman, Dubé and Paré, Benbasat et al, Strauss and Corbin, Stake, Madill et al, Glaser, Glaser and Strauss, Corbin and Strauss, Urquhart et al, Charmaz, Myles, Glaser, Urquhart and Fernandez, Saldy, Walsh et al</p>	<p>Yin, Dubé and Paré, Patton, Lee, Miles and Huberman, Eisenhardt</p>
GTM	<p>Glaser and Strauss, Strauss and Corbin, Yin, Glaser, Urquhart and Fernandez, Saldy, Walsh et al, Charmaz, Myles, Glaser, Urquhart et al, Corbin and Strauss, Glaser, Yin, Charmaz, Miles and Huberman, Urquhart, Gao and Chaitpeddi, Urquhart et al, Creswell</p>	<p>Glaser and Strauss, Strauss and Corbin, Glaser, Yin, Charmaz, Miles and Huberman, Urquhart, Gao and Chaitpeddi, Urquhart et al, Creswell, Eisenhardt, Viasst and Walsham, Strauss and Quinn</p>
Exploratory case studies	<p>Yin, Eisenhardt, Dubé and Paré, Benbasat et al, Eisenhardt and Gribner, Danermark et al, Seaman, Yin, George and Bennett, Walsham, Myles, Glaser, Urquhart and Fernandez, Saldy, Walsh et al, Charmaz, Miles and Huberman, Urquhart, Gao and Chaitpeddi, Urquhart et al, Creswell</p>	<p>Yin, Kirsch, Dubé and Paré, Seaman, Eisenhardt, Klein and Myers, Mason, Miles and Huberman, Denzin and Lincoln, Guba, Kaplan and Duchon, Goetz and LeCampte, Danermark et al</p>
Interpretive case studies	<p>Klein and Myers, Walsham, Yin, Orlikowski and Baroudi, Eisenhardt, Glaser, Glaser and Strauss, Weber, Schultz, Geertz, Reicherdt, Kvasny and Richardson, Harvey and Myers, Hinne, Collins, Van Maanen, Bowker and Star</p>	<p>Klein and Myers, Dubé and Paré, Golden-Biddle and Locke, Walsham, Seaman, Yin, George and Bennett, Walsham, Myles, Glaser, Urquhart and Fernandez, Saldy, Walsh et al, Charmaz, Miles and Huberman, Urquhart, Gao and Chaitpeddi, Urquhart et al, Creswell</p>
Ethnography	<p>Klein and Myers, Agar, Glaser and Strauss, Weber, Schultz, Geertz, Reicherdt, Kvasny and Richardson, Yin, Harvey and Myers, Hinne, Collins, Van Maanen, Bowker and Star, Myers</p>	<p>Klein and Myers, Langley, Bowen, Walsham, Saumure and Given, Patton, Erlandson et al, Glaser, Myers</p>

Positivist Case Study: Yin (1994) is the dominant methodological reference for positivist case studies, followed by Miles and Huberman (1994), Eisenhardt (1989), and Benbasat et al. (1987), all of whom espouse a realist, data-centric focus, though they are divided with respect to their emphasis on induction and deduction. While grounded theory does have some overlap with a positivist case study in that both genres tend to be more data-centric than interpretation-centric, we believe that a reference to Strauss and Corbin is less appropriate for deductive positivist case studies, and potentially applicable to inductive positivist (or even interpretive) case studies. The references used for criteria are again dominated by Yin (1994), Eisenhardt (1989), and Miles and Huberman (1994). Dubé and Paré's (2003) review article regarding positivist case studies is appropriately cited as a criteria source. Despite a few unexpected citations (e.g., Patton, 1990), we can say that positivist case studies demonstrate a reasonable level of internal coherence, with nearly all of the papers within this genre using "appropriate" references.

Grounded Theory Method (GTM): Figures 2b and 2c in Part 1 reflect the typical GTM study's focus on data as representative facts or shared reality, and the use of induction to propose new theory or frameworks. We can see from the tagcloud (Table 2) that Strauss and Corbin (1990) dominates the list of methodological references within the grounded theory papers, followed by Glaser and Strauss (1967), as well as Urquhart et al. (2010), and Yin (1994) to a minor extent. While Yin's (1994) approach from an overall methodologist's standpoint is distinct from GTM, there is some overlap, especially when it involves the inductive approach to theorizing from data.

A view of the criteria references used within the grounded theory papers is somewhat less consistent and shows a wide variety. Although Strauss and Corbin (1990) still dominates as the source to which authors most frequently turn for criteria evaluation, it is interesting to also note that references to methodologists most often associated with positivist as well as interpretive case studies—i.e., Yin (1994), Eisenhardt (1989), Klein and Myers (1999)—are in evidence, albeit with a lower frequency. While this may seem contradictory, as discussed above, the grounded theory methodology does have overlap with both inductive positivist case studies and interpretive case studies (see Eisenhardt [1989] and Walsham [1995]). Overall, we can say that for grounded theory papers, there is strong internal consistency for the methodological references and for the criteria references as well. We also see that the Strauss and Corbin variant (i.e., the "Straussian") subgenre is more prominent in the discipline, possibly because of the specificity of guidelines and procedures offered.

Exploratory Case Study: Exploratory case studies tend to adopt a realist approach to data collection and analysis with the purpose of "exploring" a phenomenon that is not well understood. The goal is to derive a clearer picture of the research topic, and exploratory case studies often end with insights, lessons, or a preliminary framework. As indicated in Figures 2b and 2c in Part 1 (Sarker et al., 2018), exploratory case studies are not typically committed to a strong data-centric or strong interpretation-centric perspective to data, and these studies rely more on induction than deduction in understanding a phenomenon. A review of the overall methodological references shows Yin (1994) as the leading reference, with Eisenhardt (1989) and Dubé and Paré (2003) used to a smaller extent. Interestingly, the references used for exploratory case study's criteria are the most widely dispersed of all the genres presented. Somewhat surprisingly, we see the emergence of Guba (1981) alongside Yin (1994) as the main criteria references. Non-positivist values are also introduced, as evidenced by passing references to Klein and Myers (1999) and Goetz and LeCompte (1984). Finally, these authors of exploratory case studies also look to generalists, i.e., references not associated with a particular genre (e.g., Denzin & Lincoln, 2000; Mason, 1996; Seaman, 1999) to justify the legitimacy of their research.

In summary, within this genre, we see positivist, interpretive, and general methodological references, which reflect a not very precise methodological positioning. The overall leaning of authors is toward methodologists such as Yin (1994) and Eisenhardt (1989); however, these studies do draw criteria from a broader array of methodological perspectives. Such a pattern of using general citations, with nonspecific guidelines invoked, has led even Yin (1993, p. 5) to observe that despite merits of investigating a phenomenon in its "raw form," research within this genre "may follow intuitive paths, [and be] perceived by others as sloppy."

Interpretive Case Study: Interpretive case studies tend toward an interpretation-centric approach and an inductive theoretical perspective. Based on the tagcloud, we observe that the dominant methodological reference is Walsham (1995), followed by Klein and Myers (1999), both of which are normatively associated with interpretive studies.

Regarding criterion references within interpretive case studies, Klein and Myers (1999) is clearly dominant with a wide distribution of other references. These include interpretive or interpretive-focused references, and references related to methodologies having overlaps with the interpretive case study approach (e.g., citations to Bryant and Charmaz's (2007) work on GTM).

All in all, we can say that while the papers within this genre demonstrate a wider variety of methodological and criterion references, interpretive case studies exhibit reasonable internal cohesion and consistency in citations.

Ethnography: We note from the tagcloud on methodological references that Agar (1986), Van Maanen (1988), and Klein and Myers (1999) dominates ethnographic studies. The presence of Agar, Van Maanen, and Geertz is consistent for this genre, as these references represent recognized ethnographers within the social sciences disciplines. Hine’s (2000) appearance, although less prominent, perhaps reveals the emergence of virtual ethnography within the IS discipline, and Glaser and Strauss (1967), while typically associated with GTM, may reflect the occasional integration of GTM methods within ethnography (Charmaz & Mitchell, 2001) or the use of GTM techniques for analysis of data in ethnographic studies.

A review of the criteria used to evaluate these studies indicate the prominence of Klein and Myers (1999), followed by Erlandson et al. (1993). Even though Klein and Myers (1999) do not offer their criteria specifically for ethnographies but for interpretive studies in general, due to the substantial overlap perceived in the IS discipline between an ethnography and an interpretive case study (as mentioned in Part 1), the use of Klein and Myers (1999) is understandable. A similar issue exists with the use of Erlandson et al. (1993), which offers criteria to judge studies within the constructivist paradigm. It is interesting to the authors of this editorial that Golden-Biddle and Locke (1993), who are specifically

concerned with “ethnographic texts,” were not referenced in connection with criteria for ethnographic work in IS. A final observation is that the majority of the papers (70%) in the ethnography genre failed to include any criteria references at all which might indicate either (a) a lack of sufficient guidance within the IS discipline regarding criteria for ethnography, or (b) a reliance on the methodological reference(s) to derive implicit criteria.

Despite the limited specialized criteria guide references (see tagcloud) and the use of Klein and Myers (1999) and Erlandson et al. (1993), we may conclude that there is adequate internal methodological consistency within this genre, given the appearance of Van Maanen (1988) and Agar (1986) as the prominent methodological references.

2.3 Articles without an Identifiable Genre

For the 75 papers that could not be associated with any specific genre, we provide an illustration to highlight the nature of confusion that these studies can give rise to. For example, we see that within this group of papers, some even switch randomly between an interpretive and a positivist stance, which leads to concerns regarding internal consistency. Other papers use a “bits and pieces” approach drawing from a wide array of methodologists, who may themselves have very different assumptions. In Table 3, we offer one specific example (of many available) from this group of papers, which could indicate how methodological credibility can suffer due the lack of consistency in the methodological description and citations.

Table 3. An Example Demonstrating Methodological Confusion^{a, b}

Article section	Statements in the article	Our comments
Initial characterization of the methodology	<p>The authors describe their study as a revelatory case study and as exploratory in nature, citing Yin (1994).</p> <p>The authors next assert that interpretive research can involve structuring and positioning research using a framework, which enables authors to derive insights beyond what can be considered anecdotal. To this end the authors note that their work utilizes Klein and Myers’s (1999) principles.</p>	<p>The authors’ initial description lacks sufficient specificity to allow readers to identify the ontological and epistemological assumptions underlying their adopted methodological approach. At this point, from the reader’s point of view, the study could just as well be data-centric or interpretation-centric though the revelatory, exploratory characterization appears to imply an inductive stance.</p> <p>This seems to suggest that the genre is that of an interpretive case study, with Klein and Myers’s principles guiding the study.</p>

Table 3. An Example Demonstrating Methodological Confusion^{a, b}

<p>Data collection and analysis</p>	<p>For data collection and the analysis, the authors draw on guidelines from Miles and Huberman (1984) and start with some initial theoretical categories to guide them.</p> <p>At this point, the authors switch to GTM coding approaches. The authors note their use of open coding and axial coding techniques from Strauss and Corbin to analyze the data. The categories generated through the coding in general match the initial theoretical categories.</p>	<p>Utilizing upfront theory, or concepts based on a chosen theoretical framework seems a reasonable approach, within the interpretive case study genre.</p> <p>Adopting a GTM technique signals a predominantly inductive theory-building endeavor. There is a degree of incongruity between the spirit of open coding in GTM and the use of preexisting theoretical categories at the beginning of the coding process. No clarifications were provided in this regard. Further, key considerations associated with GTM (e.g., Birks et al., 2013) or coding, are not highlighted.</p>
<p>Application of criteria</p>	<p>Rather than focus on interpretive research criteria offered by Klein and Myers, which was what the authors initially noted they would use, they express their concerns regarding reliability and validity issues, noting that repeatability is a core concern of their methodology.</p> <p>Next, the authors describe separately the tactics used to improve reliability, construct validity, and external validity in their study.</p> <p>These include dealing with the problem of multiple realities, and a deep concern with revealing the truth.</p> <p>The authors cite Eisenhardt (1989), Yin (1994), Kirsch (2004), and Miles & Huberman (1984) along the way.</p>	<p>Significant confusion exists regarding the genre of the study. If, as the authors assert, this study is an instance of interpretive research, the primary criteria for guiding the study would not be reliability and validity, or repeatability, which one might argue, are typically associated with positivist studies (Yin, 1994).</p> <p>Again, such a description of how the authors address the concerns of reliability and construct validity suggests that they are following a positivist approach (as understood in the IS discipline), which is inconsistent with their claims of interpretive research by following Klein and Myers's (1999) principles.</p> <p>Furthermore, viewing the existence of multiple realities as a <i>problem</i> to be controlled appears to be inconsistent with Klein and Myers's (1999) principle of multiple interpretations. On a similar note, most interpretive traditions are not particularly concerned about claiming the findings as truth.</p> <p>Again, these are excellent references, but, in our view, they do not align very well with Klein and Myers's interpretive criteria, making it difficult for the authors to maintain a level of consistency among the various aspects of the manuscript, and for the readers to judge whether the work is methodologically credible. Of course, we are not saying that references normally associated with positivist case studies such as Yin (1994) should absolutely not be cited in an interpretive case study—they may be, for legitimate reasons at times (e.g., characterizing a case as “revelatory”). Our point is that Eisenhardt, Yin, Kirsch, and Miles & Huberman aren't the most appropriate cites for guiding an interpretive case study, and thus, researchers should use these references (including the guidelines and criteria they provide) sparingly, if at all.</p>

^aWe intentionally omitted the citations and paraphrased the actual sentences so as to maintain the anonymity of this paper. Our goal is not to criticize the paper or the authors, but to highlight the lack of consistency with respect to methodological guidelines, criteria, and citations, which appears to be quite prevalent in published papers as well as in submitted manuscripts. It is only through reflection over time that we have developed an understanding of the underlying issues and the consequences, and we wish to respectfully bring this to the attention of colleagues through this editorial.

^bIt is noted that the methodological inconsistencies described in the table need not reflect confusion on part of the authors. It could have been caused by the different preferences toward methodological genres of the different members of the review team, whose views the authors may have tried hard to accommodate, albeit diminishing the methodological credibility of the work in the process.

As shown in Table 3, inconsistency and confusion related to the methodological stance exist throughout this paper. For example, the paper begins by labeling the work as a revelatory case study, however there is little indication of the study's position on the map or its specific genre. This is followed by the claim of using open and axial coding, thus implying an inductive character of the study which, in turn, signals a position on the map that leans toward the GTM tradition. In such a study, starting the analysis with codes from an upfront theory, without appropriate clarifications, would appear to be somewhat inconsistent.

The paper also labels itself as "interpretive research" and appears to suggest that it seeks to follow Klein and Myers's principles, but, perplexingly, goes on to discuss the issues of reliability and validity, which are criteria associated with, and defined consistent with, a positivist case perspective (Yin, 1994). This may have been the result of: (a) possible methodological confusion within the multi-author team, who may have different positions with respect to methodology; (b) the author team members having clarity about their methodological stance, but trying to satisfy review team members enacting/enforcing diverse preferences or implicit positions on the map (see Figure 2a in Part 1 (Sarker et al., 2018)); or (c) the author team throwing in the "kitchen sink" of criteria and references to cover all anticipated rigor demands of the review process based on past experience.

Whatever the cause, we believe that the methodological credibility (and hence, quality) of the paper suffered as a result. Moreover, being a study published in a high-profile outlet, it could potentially encourage future researchers to emulate this inconsistency, and future reviewers to demand such methodological practice/claims. Looking forward, we believe that had the authors clarified their position on the methodological map, by articulating their assumptions regarding data, theory, analysis, and claims, their methodological description may have been justifiable or at least understandable to a critical reader, and, even more likely, it could have resulted in a self-correction process leading to greater methodological consistency.

2.4 Summary of Assessment

In general, our assessment supports the categorization of genres proposed in Part 1 of the editorial (Sarker et al., 2018). More than half of the qualitative studies we reviewed could be categorized neatly into a genre which demonstrates that many authors publishing in leading journals of our discipline are aware of the different qualitative genres; this also points to the maturing of qualitative research in the discipline. In addition, we see a high level of internal coherence and consistency among the papers within each genre, as indicated by the use of methodological and criteria

references. However, it is also worth noting that a significant proportion of the studies could not be clearly categorized under any genre. Within these studies, the appropriate methodological principles are harder to determine, in part because there is no clear position with respect to the four elements of a qualitative research study, namely data, theory, analysis, and claims (see Part 1 (Sarker et al., 2018)). It is a sad commentary that as many as one third of the qualitative papers published in our set of top IS journals lack discernible methodological validity. This state of affairs is troubling. This reflects not necessarily the state of the art of qualitative research in information systems, but rather the state of the editorial review process, which has not offered proper guidance, which, in turn, the current editorial now seeks to offer.

3 Discussion and Implications

We believe the above review of existing practices of first-generation qualitative approaches in our discipline points to important lessons, which we believe can shed light on how qualitative research within the IS discipline can move forward.

The assessment of qualitative research over 17 years in our discipline does show that, in cases where authors have conducted their study with a clear genre in mind, papers exhibit internal coherence with respect to methodological practice, as represented by citations, for instance. However, we were unable to identify *any* acknowledged genre for roughly 38% of qualitative papers, which we believe is far too high a number. As shown in our example above (Table 3), not adhering to a clear genre and/or mixing different philosophical assumptions with incompatible methods and references not only increases the chances of a work being misreviewed by evaluators whom the authors then view as "prejudiced," but it also negatively affects the quality and credibility of a research study. We argue that having a clear idea of the research genre is especially important as new genres become more prevalent including multimethod approaches (Venkatesh, Brown, & Sullivan, 2016), design science approaches (Baskerville, Baiyere, Gregor, Hevner, & Rossi, 2018), and even the incorporation of qualitative data within big data studies (Abbasi, Sarker, & Chiang, 2016). Also, it is disquieting that of the 199 papers reviewed, 52% do not include any criteria references. By itself, this is not a major issue, but it leaves the door open for evaluators to use the criteria *they* prefer, irrespective of the authors' approach to the study or the appropriate criteria for the study. We also note a lack of internal consistency in the exploratory case study genre, leading us to question the value of this label and viability of the genre and appreciate why some

case methodologists assert that this genre has a “notorious reputation” (Yin, 1993, p. 4).

When authors, reviewers, and editors are not cognizant about the study’s genre, *classic* references such as Yin (1994) or Eisenhardt (1989) or Klein and Myers (1999) are referenced liberally, often without real need or justification. This is not an isolated issue within qualitative research, as similar misconceptions have been sowed and propagated within the IS discipline (and in other disciplines). For example, over time, Kuhn’s concept of “paradigm” has morphed away from his original meaning (Hassan & Mingers, 2018). Another misconception is that logical positivism is associated only with quantitative research. In our review of qualitative literature, we also saw evidence of misconceptions; many equate Yin with all forms of qualitative research, with little thought to the underlying philosophy of Yin as compared to the research study at hand. It is interesting to note when considering all of the papers reviewed, Yin (1994) (as an acknowledged reference for positivist case studies) was the dominant methodologist cited, and yet, only 10 out of 199 papers (about 5%) conducted a positivist case study! Similarly, Klein and Myers (1999) (as an acknowledged reference for interpretive studies, including interpretive case studies) is also regularly invoked in an obligatory fashion by authors and reviewers, irrespective of the study’s genre. While we believe in the value of work of these noted methodologists, we reiterate that these well-regarded references are specific toward a given genre or a certain set of genre(s).⁵ For example, Klein and Myers’s principle of interaction between researcher and subjects may not always be meaningful in a hermeneutic study that approaches data as distanced texts, and the principle of abstraction and generalization is not always embraced by ethnographers. In fact, Van Maanen and Rond (2017, p. 404) categorically state that “high-quality ethnography is relatively free from technical jargon and high-wire abstraction.” Again, this reiterates our message that qualitative studies need to use and be evaluated by the criteria appropriate to relevant genres.

⁵ Klein and Myers (1999) specifically recognize this point, and state “We caution, therefore, that the particular set of principles suggested here applies mostly to the conduct and evaluation of interpretive research of a hermeneutic nature” (p. 68). They also state “the scope of this paper is limited to addressing the quality standards of only one type of interpretive research, namely, the interpretive field study” (p. 69). Unfortunately, authors and evaluators often disregard this boundary.

We believe that our review of first-generation qualitative research genres (Part 1 of the editorial), as well as the subsequent assessment offered (Part 2 of the editorial), have important implications for both authors and reviewers/editors.

3.1 Implications for Authors

Authors of qualitative research are advised to commence their research with a genre explicitly in mind. The choice of genre can depend on the nature of data, the nature of theory, the nature of analysis, and the nature of claims, with regard to which the authors may choose to articulate their assumptions. The genre could be, but certainly need not be, any of the five first-generation genres highlighted in this essay.

We recommend that, in the manuscripts that they submit, authors explicitly name the genre of their qualitative research (e.g., Dobson & Nicholson, 2017), along with evaluative criteria and criteria references suitable for the given genre (e.g., Yang, Hsu, Sarker & Lee, 2017). Methodological labels such as “iterative qualitative data collection scheme” or “systematic field study” (as used in some papers that we reviewed) often leave readers and evaluators confused about what the methodological expectations can/should be for the manuscript. Further, it would be to the authors’ advantage to discuss their application of criteria, rather than leave it to the imagination of the reviewers and editors as to how the criteria might apply. Where known genres are used but are somewhat deviated from, and where genres completely new to the information systems research community are introduced, we recommend that the users of such genres “make the case” for their chosen genre as well as clearly communicate and apply the evaluative criteria that seem reasonable for the genre. This could be done in the body of the paper or in suitable appendices.

Finally, we discourage the use of one of the genres (“exploratory case study”) that we have identified in the literature. The label, while popular among many authors, can be said to suffer from a lack of internal consistency and, moreover, sometimes does not give due credit to the amount and quality of work actually accomplished by the authors. Further, mixing conventions and criteria of different genres indiscriminately can be confusing, is generally not advisable, and can lead to a lack of methodological validity and a loss of credibility. Mixing of genres can, of course, be permissible, provided a justification is clearly laid out.

3.2 Implications for Editors and Reviewers

For those whose responsibility it is to assess the quality of qualitative research in order to assure its worthiness of being published, the primary overall

implication is to be aware of the genre of a given piece of research and to judge it using expectations/criteria that are relevant to the genre. Editors and reviewers need to be open to the existence of many genres of qualitative research and variations within each genre, each with its own characteristics and requirements, including the possibility of new genres that the editor or reviewer might not have previously encountered (Sarker, Agarwal, Goes, Gregor, Henfridsson, Saunders, & Tan, 2015). Editors and reviewers also need to be open to genres that they personally might not favor, but are followed in the manuscripts they happen to be assessing. Familiarity with genres can also assist in instances where no genre is named or where genres are indiscriminately mixed.

Furthermore, editors and reviewers need to take the initiative to support or proactively advance genres that are not fashionable or commonly used, when their editorial sense tells them that such genres offer something unique and should be championed. Genre variety allows one to see a phenomenon in all its shapes, forms, and colors. Of course, we need to keep in mind that genres and their associated criteria are not somehow simply “given,” but result from our research community’s own social construction of reality. This is a social construction in which editors and reviewers may choose to actively play a key role.

4 Conclusion

In our two-part editorial, we have offered a critical commentary on the arena of qualitative research in the IS discipline. We have mapped out five first-

generation qualitative genres prominently used within IS research, and analyzed published papers to show in what sense the genres have (or have not) been adopted and understood within the research community, and how confusion, unfairness, and possible embarrassment can arise if issues pertaining to diverse genres and internal consistency are not given due attention.

We intend for this editorial to assist the information systems field in taking a step forward in not only enhancing such awareness of genres, but also enacting such awareness in our roles as authors, reviewers, and editors. This, we believe, will contribute to the further maturing of qualitative research in the IS discipline.

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Appendix A: Details of the Coding Procedure

To address our questions, each qualitative article was coded based on two considerations: (1) whether the article positioned itself within a specific genre; (2) what references the article used to describe the methodology or to provide guidance as how the study was conducted. Below, we elaborate the specific guidelines that were followed when coding these two perspectives.

Identification of Genre

Articles fell into three categories—those where a recognized genre was explicitly stated, those where a genre was implied, and those without a clear genre. Roughly half of the articles stated that the study was conducted in accordance with a specific genre, such as “grounded theory methodology,” “positivist case study,” etc. Some articles, while not explicitly stating a genre, implied a genre. Studies in this second category were conducted with a particular epistemological and ontological stance and the research study was conducted in accordance with evaluation criteria associated with a specific genre. For example, we coded one article as an “interpretive case study” because it claimed the non-descript label “case study” while the authors also noted that its study was conducted along the epistemological lines of interpretivism and also according to the recommendations of Klein and Myers (1999). For the remaining articles, no specific genre could be determined. Articles in this category either did not explicitly state a genre, or specified an unrecognizable genre. These articles generally did not identify any epistemological nor ontological stance. For example, an article using the generic genre label “qualitative study” and an uncommon label “iterative qualitative data collection scheme” without further indication or illustration of the study’s philosophical and methodological stance, was coded as an unspecified genre.

Methodological References and Criteria References

For each of the articles, we collected (a) the methodological references, and (b) the evaluation criteria references contained within each article. The methodological references consisted of the overall methodologist(s) used to support any specified genre and those references used to guide the study’s epistemological and ontological approach. For instance, “Agar” would be coded for an article that stated, “we conducted an ethnography study (Agar, 1986).” We considered a reference as a “criteria reference” if it was used by the authors to evaluate, judge or justify the quality of the study. Typical statements for criteria references include “we followed Klein and Myers’s (1999) principles in ensuring the quality of the research”; or “following Yin (1994), we ensure the validity and reliability of the study by . . .”. When coding these two types of references, each reference and methodologist was only counted once for each article, even when cited multiple times within the article. Additionally, there were some articles that did not include any methodological references or any criteria references. In these instances, we coded “none.”

Coding Procedure

The articles were coded using the above guidelines by two of the authors. Each of the two authors coded half of the articles. Each article was read carefully to identify what genres it followed, and what methodological references it deployed. After a subset of articles was coded, the authors cross-checked each other’s coding and any differences were discussed and resolved. The remaining articles were then coded and cross-checked in a similar matter. The coding of articles was an iterative and interactive process where discussions between authors led to a refinement of the coding scheme and recoding of some articles when warranted.

About the Authors

Suprateek Sarker (“Supra”) is Rolls-Royce Commonwealth Commerce Professor (information technology) at the McIntire School of Commerce, University of Virginia. His research, which is largely qualitative in nature, has been published in leading journals. He serves or has served on a number of editorial boards, including *MIS Quarterly* (as former senior editor), *Journal of Management Information Systems* (on the board of editors), *Decision Sciences Journal* (as former senior editor) *Information Technology & People*, *IEEE Transactions on Engineering Management*, *Journal of Information Technology Case and Application Research* (as former editor in chief) and the *Journal of the Association for Information Systems* (as the current editor in chief). In 2006, he was a corecipient of the Stafford Beer Medal from the Operational Research Society (United Kingdom); in 2016, he was awarded an honorary doctorate by the Faculty of Information Technology, University of Jyväskylä (Finland); in 2017, he was named a fellow of the Association for Information Systems; and in April 2018, he was named distinguished alumnus of Operations, Business Analytics, and Information Systems Department, University of Cincinnati, where he completed his PhD studies in 1997, under Prof. Allen S. Lee.

Xiao Xiao is an associate professor at Copenhagen Business School, Department of Digitalization. She received her PhD in information systems from Washington State University. Her main research areas include IT servitization (with the specific instance of cloud computing), ICT in emerging economies with a specific focus on digital commerce in China, qualitative research methodologies, and sports digitalization. Her research has appeared in premier IS journals such as *MIS Quarterly*, *Journal of Information Technology*, *Information and Management*, and *MIS Quarterly Executive*, as well as in conference proceedings such as the International Conference on Information Systems.

Tanya Beaulieu is an assistant professor at Utah State University, Jon M. Huntsman School of Business. She received her PhD in management information systems from Washington State University. Her research interests include communication in online communities, crowdfunding, and entrepreneur’s use of technology. She has published in outlets such as *MIS Quarterly*, *Communications of the Association for Information Systems*, and the *Journal of Computer Information Systems*, as well as in proceedings such as the International Conference of Information Systems. She is currently serving as an associate editor for the *Communications of the Association for Information Systems*. Prior to completing her PhD, Dr. Beaulieu owned a software development and consulting firm specializing in custom software development for large enterprise systems.

Allen S. Lee is professor emeritus of information systems at Virginia Commonwealth University. He served as associate dean at both Virginia Commonwealth University and McGill University, as editor in chief of *MIS Quarterly*, and as a founding senior editor of *MIS Quarterly Executive*. His research program has involved identifying basic lessons from the philosophy and history of science and extending them in the information systems discipline to show not only how qualitative research can be done rigorously, but also how quantitative research equally needs to live up to the requirements of science. He is a fellow of the Association for Information Systems, a member of the Circle of Compadres of the Information Systems Doctoral Students Association of the KPMG PhD Project, and a founder of Chinese American Professors of Information Systems. In 2015, he received the LEO Award for “lifetime exceptional achievement in information systems” from the Association for Information Systems.

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