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Editorial: The History and Philosophy Department

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Abstract:

Amid social and political upheavals and economic uncertainties and the increasingly pivotal role of information and communications technologies in society, the information systems (IS) field is perfectly positioned to address the social and technical implications stemming from these developments. One can find such discussions in historical and philosophical papers that have always attracted IS researchers' attention but that have not received a formal channel to grow and thrive. The history and philosophy department of the *Communications of the Association for Information Systems* provides such a channel. By providing an avenue to analyze historic events and past successes and failures and to encourage new philosophical thinking for the present and the future, the history and philosophy department seeks to achieve what Peter Keen (1991, p. 27) once prognosticated: for the IS field to be at the "forefront of intellectual debate and investigation about the application of IT across every aspect of…society". With this lofty goal in mind and to encourage a shift towards writing more historical and philosophical research, I describe these two intricately related genres of research that are distinct from the hypothetico-deductive research that crowds the pages of our journals but that perhaps hold the most potential for moving the IS field towards becoming an intellectually and socially influential discipline.

Keywords: Information Systems (IS) History, IS Research Methods, IS Philosophy, Disciplinarity, Historiography, IS Paradigms.

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1 Introduction

This editorial is written for the History and Philosophy Department of the *Communications of the Association for Information Systems* (*CAIS*), a formal channel that continues the history department that former Editor-in-Chief Matti Rossi established and Ping Zhang has led since 2014. The perspective of IS history in this department continues the efforts of the Association for Information System (AIS) historian Ping Zhang to accomplish the goals of the IS history initiative: 1) to collect, represent, and preserve the IS field's history; 2) to interpret, write, disseminate, and review the IS field's history; and 3) to discover/identify IS genealogy, roots, sources, and facets that deserve to be examined from a historical point of view (Zhang, 2015, 2016). These goals, together with several other recent deliberations on the importance of focusing on IS history (Bryant, Black, Land, & Porra, 2013; Hirschheim & Klein, 2011, 2012; Hirschheim, Saunders, & Straub, 2012; Land, 2010, 2015; Straub, 2015), emphasize the sense of urgency for the field to engage in this effort. The perspective of IS philosophy has also captured the attention of IS researchers, which one can see from the numerous highly cited papers in top IS journals that focus on the foundations, progress, and future of the IS field. In this editorial, I elaborate on *what* history and philosophy is in IS and *why* one should study history and philosophy in IS. IS researchers or, indeed, those from related fields such as information and management may ask questions such as: "Why combine history and philosophy?" and "What unique characteristics do historical and philosophical IS papers have?", I answer these questions and help expand the thinking and effort of IS researchers.

2 Combining History and Philosophy

In combining history with philosophy, I do not mean to dilute the significance of either one. As two of the oldest disciplines in the world, no amount of effort can dent their significance in any way, and researchers can certainly publish papers that focus on either one independently. As several journals with titles that contain both "history" and "philosophy" evidence, historical studies inevitably lead to epistemological, methodological, ontological, and ethical considerations (Keulen & Kroeze, 2012). The goal of this editorial in combining history and philosophy is to highlight two different genres of research that the typical IS researcher may not find familiar with but that may hold the most promise for the IS field in these times of great challenges and rapid changes. As I write this editorial, we are witnessing unprecedented crimes, violations of privacy and security perpetrated using IS, the dissemination of fake news, and manipulation using information not only at the individual or organizational level but also in the inter-governmental and political spheres (Sanger & Savage, 2016; Sismondo, 2017). As a field that studies these technologies and their impact on society, and the evolving interaction between the human sphere and the technical sphere, the IS field is perfectly positioned to be, as Keen (1991, p. 27) notes, at the "forefront of intellectual debate and investigation about the application of information technology across every aspect of business, government and society". One can find these unique perspectives in the tradition of historical and philosophical papers that have always attracted the attention of IS researchers. With Jan Recker's tenure as Editor-in-Chief beginning in 2015 and his on-going commitment to establish it, the combined History and Philosophy Department of the *CAIS* provides a formal channel for these unique perspectives.. By providing an avenue to analyze historic events and past successes and failures and to encourage new philosophical thinking for the present and the future, *CAIS* celebrates these two productive genres of research.

2.1 Historical Research in IS

> *Histories make men wise; poets, witty; the mathematics, subtle; natural philosophy, deep; moral, grave; logic and rhetoric, able to contend. (Francis Bacon cited in Mason et al., 1997)*

Historical research in IS represents an enigma. Recognizing the potential for historical research in IS, Harvard University initiated the MIS history project in 1988 to develop a historical tradition in MIS research (Mason et al., 1997). The project produced several exemplary studies that demonstrate the impact of IT and systems on companies and industries, including the case of American Airlines' Sabre electronic reservation system (Copeland & McKenney, 1988) and Bank of America's electronic banking system (McKenney, Mason, & Copeland, 1997). Except for several notable studies of Texaco's information technology (IT) function (Hirschheim, Porra, & Parks, 2003; Porra, Hirschheim, & Parks, 2005; Porra, Hirschheim, & Parks, 2006) and Mitev's (2006) study of the French Railway ticketing system, it would take another quarter of a century before Frank Land (2010) reminded the IS field that it had not yet established a historical tradition and that it might have been missing such an opportunity. Realizing this state of affairs,

an effort to rejuvenate historical research began taking shape in 2012, which resulted in the AIS council's setting up the AIS history task force in 2013 and its appointing the first AIS historian, Ping Zhang (2015) from Syracuse University. Following a series of historical studies that included a book chapter (Hirschheim & Klein, 2011), two special issues on history in the *Journal of the Association for Information Systems* and the *Journal of Information Technology*, with several of these papers (Hirschheim & Klein, 2012; Porra, Hirschheim, & Parks, 2014) receiving best paper awards, the AIS history task force mapped out a detailed strategy to accomplish the goals of the IS history initiative. After the AIS established the IS history initiative, Zhang (2015, 2016) conducted extensive work that included organizing numerous panels on IS history held at ICIS, ECIS, AMCIS, and PACIS conferences, setting up of the technological infrastructure, managing the conference tracks on IS history, creating a Mendeley group on IS History, and interviewing (with the help of other scholars) pioneers in the field such as Gordon Davis, Bill King, Eph McLean. Despite such encouraging developments, the IS field faces considerable challenges in its endeavors to establish a historical tradition. Writing history differs from a normal research study. History is both science and art, and, as I show in this paper, includes a good dose of philosophy thrown in to apply a method—the historical method—that is unlike any method the IS researcher is familiar with. Thus, one may not find it surprising that these efforts to encourage more historical IS studies have faced challenges.

Table 1. Most Cited Philosophical Papers in IS (Google Scholar)

	Paper	Philosophical area	No. of cites
1	Hevner, A. R., March, S. T., Park, J., & Ram, S. (2004). Design science in information systems research. *MIS Quarterly*, *28*(1), 75-105.	Epistemology (behavioral-science vs. design-science paradigms)	8125
2	Benbasat, I., Goldstein, D. K., & Mead, M. (1987). The case research strategy in studies of information systems. *MIS Quarterly*, *11*(3), 369-386.	Epistemology (positivist methods)	5133
3	Klein, H. K., & Myers, M. D. (1999). A set of principles for conducting and evaluating interpretive field studies in information systems. *MIS Quarterly, 23*(1), 67-94.	Epistemology (interpretive methods)	4575
4	Walsham, G. (1995). Interpretive case studies in IS research: Nature and method. *European Journal of Information Systems*, *4*(2), 74-81.	Epistemology (interpretive methods)	3283
5	Orlikowski, W. J., & Baroudi, J. J. (1991). Studying information technology in organizations: research approaches and assumptions. *Information Systems Research, 2*(1), 1-28.	Epistemology (positivist, interpretivist, critical methods)	3797
6	Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly, 26*(2), xiii-xxiii.	Philosophy of science	2979
7	Orlikowski, W. J., & Iacono, C. S. (2001). Research commentary: Desperately seeking the "IT" in IT research—a call to theorizing the IT artifact. *Information Systems Research, 12*(2), 121-134.	Philosophy of technology	2446
8	Straub, D. W. (1999). Validating instruments in MIS research. *MIS Quarterly, 13*(2), 147-169.	Epistemology (validation of methods)	2392
9	Peffers, K., Tuunanen, T., Rothenberger, M. A., & Chatterjee, S. (2007). A design science research methodology for information systems research. *Journal of Management Information Systems, 24*(3), 45-77.	Epistemology (design science method)	2064
10	Gregor, S. (2006). The nature of theory in information systems. *MIS Quarterly, 30*(3), 611-642.	Metaphysics (ontology) of theory	1932
11	Lee, A. S. (1989). A scientific methodology for MIS case studies. *MIS Quarterly, 13*(1), 33-52.	Epistemology (positivist method)	1569
12	Mingers, J. (2001). Combining IS research methods: Towards a pluralist methodology. *Information Systems Research, 12*(3), 240-259.	Epistemology (mixed methods)	1393

2.2 Philosophical Research in IS

Like IS history, IS philosophy is also somewhat of an enigma. Among the most cited studies in IS includes those that concern the philosophy of science, the top twelve such studies (see Table 1)—which deal with metaphysics, ontology, or epistemology—have collected nearly 40,000 citations.

As these citation numbers show, papers that have generated a lot of dialogue concern philosophy (mostly epistemology), yet younger researchers are not only deterred from writing philosophical papers, it is viewed with some degree of disapproval. Many researchers view philosophy in IS as the exclusive purview of senior authors, whereas the IS field's future hinges on younger researchers' being able to innovate and expand beyond existing intellectual structures. At the same time, philosophy papers are notoriously difficult to publish, especially in top journals. At one major American university, a doctoral seminar on the philosophy of science course that was previously required for all PhD students was no longer made required for accounting and management students. Allen Lee (2011), *MIS Quarterly's* editor-in-chief from 1999-2001 who taught that course, noted that: "Professors who have been trained in only the statistical and who have not received serious exposure to other traditions will, of course, teach and expect the same of their students". The lack of exposure to critical philosophical thinking places blinders on those students from seeing alternative views. Such a stance toward philosophy is misplaced because philosophy has never historically been averse to mathematics or statistics, which philosophers of mathematics and statistical analysis such as Pascal, Pierce, Whitehead, and Russell attest to. For the IS field to escape blinders it may have and produce original, socially relevant, and influential knowledge, we need to conceive and explore alternatives to current ways of thinking. However, we can do so only if we understand, identify, and challenge the assumptions that underlie that research (Slife & Williams, 1995), and philosophy offers guidance along that path (Hassan, 2014). As philosopher Karl Jaspers (1954, p. 12) puts it:

> *There is no escape from philosophy. The question is only whether a philosophy is conscious or not, whether it is good or bad, muddled or clear. Anyone who rejects philosophy is himself unconsciously practicing a philosophy.*

Philosophical thought has guided all outstanding scientists and theoreticians, which has enabled them to comprehensively and critically analyze all the principles and systems known to science, discover any internal contradictions, and overcome them by introducing new concepts. In other words, real scientists are philosophers to the core just as truly philosophical thought is profoundly scientific, which one can see in the high number of scientific achievements that philosophy has inspired (Spirkin, 1983).

Philosophy in IS continues to undergo a kind of renaissance in part due to the problems that the field faces in terms of its relevance (Applegate, 1999; Benbasat & Zmud, 1999; Desouza, El Sawy, Galliers, Loebbecke, & Watson, 2006; Grover, Lyytinen, Srinivasan, & Tan, 2008; Keen, 1991; Rosemann & Vessey, 2008; Straub & Ang, 2011), identity (Agarwal Lucas, 2005; Alter, 2003; Benbasat & Zmud, 2003; El Sawy, 2003; Gray, 2003; Robey, 2003), diversity (Banville & Landry, 1989; Benbasat & Weber, 1996; Robey, 1996; Taylor, Dillon, & Van Wingen, 2010), theoretical development (Keen, 1980, 1991; King & Lyytinen, 2004; Lyytinen & King, 2004, 2006; Weber, 1987, 2006, 2012), communication deficits among its numerous research subareas, and disconnection from its practitioners (Hirschheim & Klein, 2003). Philosophical papers on the principles for conducting interpretive field research (Klein & Myers, 1999), on research approaches and assumptions (Orlikowski & Baroudi, 1991), causality in research (Markus & Robey, 1988), on theorizing the information technology (IT) artefact (Orlikowski & Iacono, 2001), on methodological problems in research (Lee, 1989), and on the nature of theory in IS (Gregor, 2006) are among the most cited and visible IS papers, which indicates the significance of philosophy-related issues to the IS community. Early philosophical discussions on the relevance (Benbasat & Zmud, 1999) and identity of the IS field (Benbasat & Zmud, 2003) remain current and unresolved (Fedorowicz, 2013; Hassan, 2011).

CAIS publishes research that vigorously debates these same philosophical issues thanks to the late Paul Gray, who encouraged a spirit of open discussion on issues such as the relevance of IS (Gray, 2001), the IS field's core (Gray, 2003), and the wisdom behind self-citing practices (Gray, 2009). At ICIS 2012, four out of the eight panels were philosophical discussions, such as on alternative genres for research and the design science and sociomaterial paradigms. The Special Interest Group on Philosophy of Information Systems (SIGPHIL) workshops during recent ICIS conferences in Shanghai, Orlando, Milan, Auckland, and Fort Worth consistently enjoyed full attendance. IS scholars such as Hirschheim, Klein, and Lyytinen (1995) published a classic on the philosophy of IS development while Mingers and Willcocks (2004) published another book on the historical and critical analysis of alternative approaches and philosophies. The interest for IS philosophy continue to grow as top IS journals continue to sponsor special issues on the merits of alternative philosophies (Avital, Mathiassen, & Schultze, 2017; Cecez-Kecmanovic Galliers, Henfridsson, Newell, & Vidgen, 2014; Mingers, Mutch, & Wilcocks, 2013).

Theorizing has also attracted much attention in IS, which debates on the notion of "native IS theories" and the role of theories in research have in part triggered (Avison & Malaurent, 2014; Gregor, 2014; Markus, 2014; Straub, 2012). As a result, ECIS established a permanent "Advancing Theories and Theorizing in IS Track" in 2014 to encourage new theorizing approaches. The European and Australasian IS communities have always supported research in philosophy (e.g., Walsham (1995) on interpretive research, Myers (1997) on qualitative research and Mingers (2001) on pluralism in research, and the Australian National University's annual workshop on Information Systems Foundations since 2005) and continue to shape the IS field's philosophical landscape. The *European Journal of Information Systems* has scheduled to publish a special issue on IS philosophy at the end of 2017. Philosophy in IS has come a long way since the inaugural conference on philosophy and research methods in Manchester (Mumford, Hirschheim, Fitzgerald, & Wood-Harper, 1985). Given these historical developments, it seems fitting that *CAIS* combine history and philosophy in the same section. It also should come as no surprise that Thomas Kuhn, for example, began as a historian of science before becoming among the most celebrated philosophers of science.

3 What Makes the History of IS Unique?

It is easy enough to write about the history of computers with its conveniently available treasure trove of artifacts, documents, and living legends associated with that subject matter. But, as Zhang (2015) and Bryant et al. (2013) emphasize, *the history of computers is not the history of IS* even if one considers the obvious overlaps. Thus, if we do not write about computers per se, then the question about what we have to write about arises. Further, should we write about the field's history, or is there something else about IS that could be "historical"? The IS history initiative addresses what we have to write about: it focuses on the IS field itself (see Section 1). It does so partly to capture that history while the pioneers of the field are still among us and while memories are still fresh. Consequently, efforts in collecting what historians call the "primary sources" of history—eyewitness accounts—takes the highest priority, and such efforts will continue to build the history of the field as long as we can gather those sources and, later, secondary sources. As Bryant (2013) and colleagues eloquently state, the process of researching and writing the IS field's history addresses most, if not all, of the aforementioned concerns the field currently struggles with. What identity would nations have if not for the history about them? Further, the arts would not have a defined subject matter if not for art history, and one can say the same for any other discipline. Further, as far as relevancy goes, anything of significance is recognized and becomes relevant when we say that *it will go down in history*. The history of the IS field, as it pertains to *who* does the studying, is closely related to but not always synonymous with *what* is being studied (i.e., the subject matter of IS). In other words, the IS field's history includes not just the history of the field itself but also the history of the *subject matter of IS*. The former study concerns historical figures and developments in the IS field, while the latter concerns historic IS events.

For both, the historian's task in writing history concerns more than the documentation of a parade of personalities, events, and dates; a nostalgic trip down memory lane; or even, as Humboldt puts it, a "present[ation of] what actually happened" (von Ranke, 1973, p. 5). Even before historians[1] can collect such "facts", they are burdened with choosing what is significant enough to be historical and with discarding the rest as unhistorical. Thus, not all historical events in computer science are relevant to IS, and what is *historic* in IS need not be the same as what is historic in computer science. This argument applies to historical figures as well. Before one can claim historic figures in computer science as such (e.g., Codd (1970) and Chen (1976) who conducted work databases, Brook (1975) who conducted work on software engineering, and the numerous scientists responsible for the Internet such as Vint Cerf and Tim Berners-Lee (Leiner et al., 2016)), they have to be associated with an IS-related event. Many will agree that the invention of the Internet relates to IS, but which part of that invention concerns the IS field's subject matter? Ultimately, a historical fact or historical figure only becomes historical for a field of study when a historian in that field decides so. As Carr (1965) notes, "the facts speak only when the historian calls on them" (p. 9). The goal here is not to be exclusionary but rather to emphasize that the study of IS history goes beyond artifacts or technologies (Bryant et al., 2013; Zhang, 2015). IS history combines the technological, political, and social events to document what one can truly say to be momentous IS-related events. And once those historical events become part of the field's history, it will be able to build a rich and varied historical tradition that is socially relevant and influential.

[1] The term "historian" here refers to any researcher who undertakes a study of the past and applies the historical method.

Thus, the implementation of an early enterprise-wide computer system in 1953 by a relatively unknown but large UK company, J. Lyons & Co., that owned teashops and hotels, and supplied bread, cakes and pastries, becomes the Association of Information Systems' (AIS) symbol of a momentous historical event that is worthy of the association's lifetime achievement award, the LEO (Caminer, 1997; Ferry, 2003). We can debate whether the event should have received such an accolade; regardless, the AIS chose it because it has significant implications on the subject matter of the field that appropriates it as being historical. The AIS could have easily chosen the implementation of the EDSAC computer, also in the UK, four years earlier in 1949, when it first calculated a table of squares (Anonymous, 2011). Or it could have chosen UNIVAC's accomplishment to predict the outcome of the U.S. presidential elections (Brinkley, 2006) in 1952 as that major IS historical event. Indeed, it could have chosen many other significant computer-related events, such as General Electric's implementing UNIVAC to automate its clerical and payroll tasks that occurred during the same period or Metropolitan Life Insurance Company's planning to use computers for insurance. But what made the J. Lyons & Co. implementation most significant as far as it concerns the IS field was that the company not only sponsored the EDSAC project but also designed, built, and implemented an EDSAC-derivative system, the Lyons Electronic Office (LEO), that automated the company's office tasks and developed what would be called a decision-support system (DSS) for management decision making (Land, 2010, 2015). The architect of that system, John Simmons, would later describe how he accomplished that historical achievement in one of the earliest texts on IS (Simmons, 1962). Such a network of related events means that LEO has historical significance to the IS field.

The nature of the event; its technical (constructing the computer), social, business, and political connotations in the form of LEO's requirements; Simmons' leadership as the prototypical chief information officer (CIO); the successful adoption and implementation of the new system in uncharted waters; and LEO's spin-off into a range of similar models that would service several industries all characterize something other than computer science, management, or any discipline. When analyzed historically, these events and significant developments simultaneously resolve the issues of the IS field's identity, subject matter, and relevancy. These kinds of considerations featured prominently in the exemplary historical IS studies of the Harvard MIS history project (Mason et al., 1997).

4 Philosophy of IS: Quo Vadis?

We cannot divorce IS's history from discussions about its philosophy. Historically, many of the philosophical discussions and debates I mention above in this paper revolve around epistemology, which concerns how researchers can gain IS knowledge and which research methods and approaches are appropriate (Galliers & Land, 1987; Hirschheim & Klein, 2012; Mumford et al., 1985). In many research fields, method papers collect the most citations because researchers who apply particular methods acknowledge the guidance that those papers provide. For example, the most highly cited paper in publishing history (Lowry, Rosenbrough, Farr, & Randall, 1951) (over 300,000 citations) is a research method for determining the quantity of protein in a cell. Research methods are the practical implementation of the epistemological underpinnings of that research. The IS field demonstrates a rich tradition in this area of philosophy. Churchman's (1971) conceptualizing IS as "inquiring systems" provided the IS field with an early form of epistemological philosophizing that remained influential for decades. The Scandinavian tradition (led by Langefors (1973) and his colleagues) mirrors Churchman's systems thinking, and later Checkland's phenomenological approach challenged and enriched both (Checkland, 1972, 1990). The "hard-systems" behavioral paradigm became dominant in most of the IS field's subfields (as Table 1 shows), such as decision support systems (Keen & Scott Morton, 1978), social psychology of IS (Davis, 1989; Mason & Mitroff, 1973), or IT competitive advantage (Porter & Millar, 1985). Researchers soon raised concerns about its dominance in the IFIP TC8 Working Group, which culminated in a historic conference in the UK (Mumford et al., 1985) that introduced the field to alternative approaches, including interpretive (Walsham, 1995) and critical philosophies (Boland & Hirschheim, 1987; Lyytinen & Klein, 1985). Over the years, these alternative epistemologies have struggled to gain traction and have done so to varying extents. However, the top journals in IS continue to favor the behavioral and positivistic approach (Chen & Hirschheim, 2004; Orlikowski & Baroudi, 1991).

Epistemology, of course, is not the only area in philosophy. Researchers have not explored the question of metaphysics of IS, such as the philosophy of technology and the philosophy of information, at any great depth. What Keen (1980) referred to as the field's "dependent variable"—information—carries implications far beyond the typical correlational research connotations; as Keen notes, "[s]urrogates for improved

information, such as user satisfaction or terminal hours of usage, will continue to mislead us and evade the issue of a theory of information for MIS" (p. 9). One can no longer view information as mere symbols; rather, information is a demiurgic power that makes "possible the construction, conceptualization, semanticization and finally the moral stewardship of reality, both natural and artificial" (Floridi, 2003, p. 645). So optimistic was the outlook for IS that, as a core concern of the IS field, one would expect a thorough treatment of what technology means in IS. However, the IS field has historically neglected technology (Orlikowski & Scott, 2008), and it continues to debate what "information technology" means and what relationship it has to IS (Alter, 2015; Baskerville, 2012; Lee, Thomas, & Baskerville, 2015; Paul, 2007). Lee (2010) notes that these two concepts are not the only key ones that the IS field has neglected to its detriment. As part of first principles of philosophy, studying the metaphysics of IS demands that researchers are clear what "information", "technology", "system", "organization", "network", "theory", "causality", and other fundamental entities mean for the IS field. It is not enough that we adopt the lay version of "technology" or "social network" into our research, we need to define these fundamental entities in terms that are not only specific to IS but also commensurable with how researchers in other fields apply them so that any discussions in IS become relevant and useful to other disciplines. It is for intractable problems such as these that philosophy is most fecund and inspiring.

Other than epistemology and metaphysics, other areas of philosophy in IS are becoming even more socially relevant. For instance, after the high-profile security breaches that the Democratic Party (Sanger & Savage, 2016), Target, and Home Depot (Hardekopf, 2015) experienced in the United States, it should be clear that one can no longer rely on the traditional paradigm of monitoring and blocking threats to prevent security breaches. These philosophical subareas of axiology, ethics, and security were major considerations during the early formative years of the IS field (Mason, 1986), but researchers have not seriously engaged with such topics until recently (Bélanger & Crossler, 2011). We need a new approach to address the increasingly expanding space of exposure that an ever-expanding IT network creates. Users experience the same kind of disruption in their privacy as big data causes individuals and organizations to digitize and aggressively analyze more and more private information. What is considered normal for privacy and security is rapidly disappearing, and the IS field is perfectly positioned to reimagine what is normative, ethical, and moral and to arrive at an ethical and theoretical grounding of privacy and security that can address these contemporary issues (Mingers & Walsham, 2010; Stahl, 2012, 2013; Stahl, Eden, Jirotka, & Coeckelbergh, 2014).

Aesthetics represents another emerging area of IS philosophy that speaks for the finer side of human needs beyond its functionalist utilitarian tradition (Cyr, Head, Larios, & Pan, 2009; Tractinsky, 2004). The sources for such IS knowledge extend to disciplines that the IS field has yet to engage, such as architecture (Lee, 1991, 2010) and the humanities. Little in the sciences does not have its foundations in the humanities. What can the natural sciences claim without its roots in natural philosophy? What can the social sciences speak of without referring to history? And what can any science establish without founding it in language? From these sources of knowledge comes inspiration in the form of the philosophy of design, arts, and law. Visualization, human computer interaction, animation, and simulation are but a few areas in IS that depend on aesthetics.

Therefore, the areas of history and philosophy in IS require a different kind of scholarship and writing compared to what IS researchers are used to: with this editorial, I hope to help researchers expand into those different directions. Because these two genres of history and philosophy unearth for IS researchers insights not possible by the hypothetico-deductive method, they not only hold the most potential for not only moving the IS field forward but also enriching the existing traditional behavioral methods, which would help make the IS field an intellectually and socially influential discipline.

5 Topics in the History and Philosophy of IS

The topics possible in either history or philosophy or both together have an infinitely wide range, and, at the risk of limiting them, I present several suggestions in this section. Such research can take the shape of empirical papers with a historical and philosophical lens (Mitev, 2006) or conceptual papers that discuss principles, ideas, or theories.

5.1 Welcomed Genres of Historical Studies

Genres of historical studies that *CAIS* would accept include but are not limited to studies that:

1. Analyze the antecedents that precipitate significant developments in technology or the IS field and the consequences of those developments.
2. Uncover who we are, where we come from, and where we are headed. Histories help establish a sustainable identity and engender legitimacy.
3. Map out the IS field's evolution and what brought us here today (including both our successes and our failings).
4. Prognosticate our future (especially our relationships with other fields of study and the potential that lie with them).
5. Intentionally forget our traditions that no longer serve us well and abstract those that provide innovative and fecund insights.
6. Highlight discontinuities in the history of IS development.
7. Transform what is strange and unfamiliar today towards becoming more familiar when viewed from its historical perspective. This activity includes confronting ourselves and seeing ourselves from the point of view of others.

Philosophical papers promise an equally exciting array of possibilities. The field can undergo an intellectual revolution if we confront its social forces and practices and their underlying philosophies. Once the IS field understands these philosophies and forces, it will be able to formulate strategies that will help move it forward and transform it into a vibrant and socially relevant discipline (Hirschheim & Klein, 2012; Klein & Hirschheim, 2008). For philosophy papers, *CAIS* looks for papers that connect directly to the demands and concerns of both the field and society at large. The IS field stands to gain from philosophical insights from the humanities, linguistics, architecture, and design and aesthetics. Every day, we face increasingly complex and intractable questions (such as ethical and privacy- and security-related questions) that, in many cases, empirical science cannot address. Philosophy affords an opportunity for IS researchers to write papers that help them reflect on the past and possibly offer solutions to these questions.

5.2 Welcome Genres of Philosophical Papers

Philosophical papers can include essays, conceptual work, logical argumentation, reviews, scientometric research, interpretive, hermeneutic, ethnographic, or grounded theory studies, and discourse or content analysis. Specifically, submissions may address but need not be limited to the following topic areas:

1. In metaphysics and ontology, discuss the philosophy of information, technology, and design and how, in the wake of fake news and misinformation, society can be better served.
2. Continue efforts in developing native theories and explicating the theorizing process in IS.
3. Challenge the traditional dualist ontologies (subject-object, body-mind) and present exemplars of research where non-dualist ontologies (e.g., Heideggerian, Merleau-Ponty, Latour, Levinas, Deleuze and Guttari) provide useful interpretations for technology.
4. Reexamine weakly constructed foundations of IS or widely accepted assumptions that no longer can carry research into the 21st century.
5. Establish the importance and relevance of philosophy to IS, especially for the IS field's various subfields (e.g., philosophy of IS development).
6. In epistemology, reconsider the usefulness of current understanding of paradigms in IS research, existing intellectual traditions, and the hegemony of certain approaches in research.
7. Work towards a general agreement of the intellectual ideals of IS research and what it means to undertake "original" IS research.
8. Investigate the path towards professionalism and establish the IS body of knowledge.
9. In the areas of axiology, ethics, morality, privacy and security, reconnect with the previous research in IS ethics and deontology, encroachment of IT into the lives of people, misuse of information, and virtual and discourse ethics.
10. Take advantage of the rich resources from the fields in humanities to build a humanities-enriched IS research program.
11. In the area of aesthetics, construct the foundations of the philosophy of aesthetics in IT.

12. Research the balance of form, utility, and beauty in IS and delve into design and visual aesthetics of systems and how they fill emotional human needs in technology.

Authors can write papers as separate historical and philosophical studies, but papers can also integrate both historical analyses and philosophical perspectives, which follows in the footsteps of giants such as Thomas Kuhn (1970). *CAIS* particularly welcomes submissions that adopt clear language that individuals from various backgrounds can understand and submissions that are directly relevant to the concerns of society. In sum, *CAIS* offers this open channel for “new thinkers” and inquisitive writers who see a bright future in the IS field.

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