## Classification Research

## Social Epistemology as Theoretical Foundation for Information Science: Supporting a Cultural Turn, Copenhagen, August 16-17, 2017

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Jenna Hartel is an associate professor at the Faculty of Information, University of Toronto. She is passionate about the history, theory, and methods of library and information science. Her research is organized around the question: "What is the nature of information in the pleasures of life?" She is investigating this matter through the concatenated study of information phenomena in serious leisure—cherished, information-rich pursuits such as hobbies. Her empirical research explores the content, structure, and use of leisure information on personal and social levels, and her theoretical work aims to characterize the nature of information in leisure realms.



On August 16-17, 2017, the University of Copenhagen's Department of Information Studies (INF) hosted a symposium entitled Social Epistemology as Theoretical Foundation for Information Science: Supporting a Cultural Turn (the conference website has been archived at http://www.webcitation.org/6vhmv2dQH and presentation titles and abstracts are at http://www.webcitation.org/6vmYdV7jp). The event was funded by the Danish Agency for Science and Higher Education and organized by Birger Hjørland, Professor in Knowledge Organization at INF. More than a dozen distinguished scholars and an equal number of doctoral students from information science and neighboring disciplines attended. The international audience hailed from Brazil, Canada, Denmark, England, India, South Africa, and the United States

The first day of the symposium opened with a keynote by Steve Fuller, Auguste Comte Chair in Social Epistemology at the University of Warwick, followed by several invited presentations. The second day was a workshop to provide expert feedback on research projects in-progress. This article reviews the keynote and subsequent presentations of the first day, which are intended to be published as a book edited by Hjørland and Fuller. As the inaugural

event of its kind, the main concepts of the symposium deserve

elaboration in order to establish their relevance to this journal's readership; then this article reviews the invited presentations.

Social epistemology was a vision for library and information science (LIS) articulated by Shera (1951), and Shera and Egan (1952). In contrast to the dominant practice-oriented approach to librarianship of the day, social epistemology was a framework to (Shera 1961, 769):

lift the study of intellectual life from that of the individual to an inquiry into the means by which society, nation, or culture achieves an understanding relationship with the totality of the environment.

Of interest to this journal's readers, social epistemology was originally conceived in relation to bibliographic control by shifting attention from microcosmic bibliography, concerned with individual information access, to bibliography from a macroscopic perspective, attuned to large scale knowledge flows. Perhaps because Margaret Egan died unexpectedly in 1959, the idea of social epistemology was not developed further and fell into relative ob-

scurity in the LIS literature with important exceptions (Wilson 1983).

In 1987, sociologist Steve Fuller launched a journal and published a book (1988), both entitled Social Epistemology, to denote an interdisciplinary domain of scholarship that sought to understand and sanction ideal practices of knowledge production and dissemination. In 1996, Fuller realized Egan and Shera's preceding contribution and has since encouraged LIS to take its rightful place in what has become a dynamic domain of research (Fuller 1996). Since Egan and Shera's pronouncements about social epistemology decades ago, many LIS scholars have embraced a macroscopic perspective to recognize the historical, social, and cultural roots of knowledge and its access mechanisms. The symposium's participants are leaders of this "cultural turn" and came to Copenhagen to discover if social epistemology, in its original or reincarnated formulation, can provide a theoretical foundation for their work, create common ground for collaboration, and help to orient future research.

At 9:00 in the morning on the first day of the symposium, Birger Hjørland welcomed visiting scholars and students to the RSLIS and to Copenhagen. To motivate those present and steer the conversation in productive directions, he posed a number of broad, guiding questions: What is social epistemology? What is it not? How is social epistemology in LIS related to social epistemology in other disciplines? What are our reasons for adopting and doing social epistemology in LIS? It should be noted, however, that although these questions were phrased in terms of the whole discipline of LIS, the symposium's participants were mostly specialists in knowledge organization. First up was the keynote speaker, Steve Fuller (University of Warwick, UK), a prolific and wide-ranging inter-disciplinarian who contributes to sociology, science studies, philosophy, law, and knowledge management (Fuller 2002), among other fields. As already mentioned, he is responsible for the second incarnation of social epistemology.

Fuller's keynote, "LIS's Role in Social Epistemology: The Problem of Underutilized Epistemic Capital," was an electrifying pep talk to LIS scholars and librarians alike. He encouraged us to make use of our own theoretical foundations and centuries of unparalleled frontline experience in the provision of knowledge to facilitate and improve knowledge production across all levels of society. He endorsed Egan and Shera's social epistemology as one inspired vision and pointed to other native big ideas as well. The documentalist, Paul Otlet, Fuller argued, boldly projected LIS into global space through the concepts of a world city, Mundaneum, and universal "book" that each organized knowledge in unprecedented ways. Otlet's enterprise was aligned with the highest levels of government, Fuller noted, and sought to prevent war and

fortify peace through global information sharing. Without saying so directly, Fuller's talk implied the question, "What could offer a more sweeping and socially engaged theoretical framework for LIS than that?"

On a more critical note, Fuller sounded an alarm; namely, that academics are getting away with information practices that violate the integrity of knowledge production. He used an example of a genre, the literature review, that is used to justify empirical studies and grant proposals. Fuller asserted that the literature review is a myth, that scholars do no such thing. Instead, they cite idiosyncratically to display affiliation and flatter editors, grant-reviewers, and other decision-makers. Fuller expressed his belief that LIS scholars and their professional counterparts are the only stakeholders in knowledge production who can monitor the standards of information formats and to intervene, diagnose, and correct this problem.

During the discussion period that followed, Jonathan Furner (University of California, Los Angeles, USA) asked with some skepticism, "The bulk of our intellectual history concerns professional practices; can a more critical LIS be based upon such humble materials?" Fuller responded that even empirical or applied work from decades ago can have profound theoretical implications because so many great ideas in LIS are unrealized. As an example, he invoked Swanson's (1986) research into undiscovered public knowledge. Fuller asserted that scholars and librarians are still unable to recognize potentially lifesaving discoveries that are scattered across far-flung literatures despite the fact that this knowledge is purportedly organized. In short, the provocative keynote speaker cast LIS as an overmodest, marginalized, but wellendowed discipline, and he identified opportunities for us to more aggressively make a positive impact on knowledge production, organization, dissemination, and use.

After the keynote, the first invited presentation was scheduled to be by Finn Collin (University of Copenhagen, Denmark). Unfortunately, at a late hour, Collin was not able to attend. As the leading reader, interpreter, champion, and occasional critic of Fuller's social epistemology, his contribution to the symposium's theme is indispensable. Highlights drawn from his earlier writings (2013) are included here because they answer one of the questions raised in the welcoming address by Hjørland, "What is (Fuller's) social epistemology?" To paraphrase Collin's extensive writings on this matter: Fuller's conception of social epistemology begins with the insight that human cognition is always implemented in various material structures, such as the human brain and body, books, computers, tools and most significantly, societal organizations and power structures. This embodiment offers various affordances and hindrances to cognition, the effect of which cannot be divined a priori. As a result, social

epistemologists must leave the philosophical armchair and examine knowledge production with naturalistic methods. Upon doing so, they discover that all knowledge is social in nature. As a result, for Fuller, epistemology is primarily social and must subscribe to a normative agenda aimed at reforming society's knowledge-producing practices and institutions. Readers of *KO* may consider a classification system to be one of the many social "tools" and "power structures" that Collin makes the object of Fuller's research program. Jansen's (2017) recent dissertation used naturalistic methods to study Canada's National Occupational Classification and is a template for research into knowledge organization that likewise fits under the umbrella of Fuller's social epistemology.

Next on the agenda was Hjørland's "Social Epistemology and Classification Theory." In this presentation, the speaker argued that Shera's social epistemology, as described in his 1951 article, aligns with contemporary approaches to classification theory and therefore has potential to be a theoretical foundation for knowledge organization and LIS as a whole. To support this claim, Hjørland reviewed a "family" of contemporary culturally-oriented approaches to knowledge organization: domain analysis, postmodern philosophy, social constructivism, paradigm theory, hermeneutics, critical theory, and feminist epistemology, and highlighted their affinities with social epistemology (Mai 2011). For example, both social epistemology (Shera 1951) and domain analysis (Hjørland 2017) assert the importance of subject knowledge in librarianship. To bring contrasting views into focus, Hjørland noted that Ranganathan's faceted schemas are rational and less organic information structures; hence, they do not fit within the social epistemology neighborhood.

To further illustrate the dynamic synchronicity between knowledge organization and local contexts, Hjørland analyzed classification systems related to the arts, mental diseases, celestial bodies, and birds. Interestingly, his fourth and last case of bird classification was an unexpected counterpoint to his own position that favors socially constructed information structures. Recently, ornithologists are moving in the direction of consensus on a new classification scheme for birds, based partly upon molecular genetics. There is a sense across the birding community, which also includes amateurs, that this system feels universal and even permanent. The symposium audience left this surprising discovery as an open question to ponder in the future.

The fourth presentation, "Social Epistemology: Still the Best Framework for LIS?" was delivered by Daniel Martínez-Ávila (São Paulo State University, Brazil) and Tarcisio Zandonade (University of Brasília, Brazil). Zandonade is a renown Shera scholar whose personal library contains 433 of 490 items known to be authored by

Shera. He is responsible for the landmark paper, "Social Epistemology from Jesse Shera to Steve Fuller" (2004), that was the first to trace the relationships between the two scholars. The presentation had three objectives: 1) to provide new insights into the intellectual context and project of Egan and Shera; 2) to perform a textual consolidation of Egan and Shera's writings on social epistemology; and 3) to survey the reception of Egan and Shera's social epistemology in the LIS literature since 2004. Given the limittations here, there is only space to comment upon the first and third aims. Martínez-Ávila and Zandonade reported the following theoretical influences in American universities during the first half of the twentieth century: British Utilitarianism, Pragmatism, North American Neo-Realism, British Neo-Realism, Analytic Philosophy, Cambridge Philosophy, and Oxford Philosophy. Among these, it was the Pragmatism of Peirce, James, Dewey, and Mead that the authors claim had the strongest influence on Jesse Shera.

Martínez-Ávila and Zandonade's review of recent writings on social epistemology was organized into three sections that included almost 100 references. Under the banner of "Major Revisions of Egan and Shera's Social Epistemology" they mentioned Furner's (2004) tour-de-force argument that Margaret Egan, not Jesse Shera, was the mastermind behind social epistemology. The section entitled "Works in LIS Applying or Using Egan and Shera's Social Epistemology" notes Smiraglia's (2008) use of SE for the education for future catalogers and his concept (inspired by social epistemology) of "cultural synergy" (2014). Finally, a section entitled "The Importance of Social Epistemology for Current Knowledge Organization" reported Anderson's (2004, 2008) linkage of social organization and knowledge organization through the lens of social epistemology. Martínez-Ávila and Zandonade's contribution to the symposium and forthcoming papers are important and comprehensive reference works about social epistemology and contain authoritative statements on the concept itself and its literature. These are sure to become go-to resources for interested scholars.

"Social Epistemology, LIS, and Intellectual History" was then presented by Archie Dick (University of Pretoria, South Africa). In opening reflections, Dick reminded the audience that Jesse Shera was above all an historian and a champion of the library as a cornerstone of democracy. In the same spirit, he reported his own research-in-progress involving the Western Cape region of South Africa from the late-eighteenth to mid-nineteenth centuries. Dick described his hands-on examination of private book collections, book auctions, reading societies, and subscription libraries to answer the question: How were these entities used to spread Enlightenment ideas? The project thus far has uncovered habits of book shar-

ing among friends, a marketplace for the private sale of books, and the establishment of the first reading societies and village libraries in the Cape countryside. Dick's project is an example of historical research under the banner of social epistemology as it uses the paper trail of publications to tell the story of the spread of ideas in a particular cultural, temporal, and local context. Dick's presentation in Copenhagen included the research design and preliminary findings of this project. The final outcomes will appear in the proceedings text mentioned earlier.

In "Society, Epistemology, and Justice: Prospects for a Critical LIS?," Jonathan Furner (University of California, Los Angeles, USA) applied conceptual analysis to recent work at the intersection of epistemology and ethics to arrive at a potentially innovative mode of critical library and information science. To do so, he first pointed to the symposium's theme of social epistemology as a mandate for LIS to apply the values of truth and relevance in the design of information access systems. Secondly, he reminded the audience that the unique mission of LIS (and KO) goes beyond social justice to epistemic justice, that is, equal access to the world's recorded knowledge. Third, Furner championed the opportunity for a "veritistic turn" within our discipline and profession wherein truth supplants relevance as the leading requirement of information provision. This final proposition by Furner challenges our field's attachment to the concept of relevance, problematizes our embrace of codes of ethics with claims to neutrality, and extends ideas hatched earlier by Begthol (2002) and Mai (2013), among others. Furner's concluding point cast the veritistic turn as an utmost necessity in an era of Trump, fake news, and "alternate facts."

Next, Melodie J. Fox (Milwaukee, USA) presented "Feminist Epistemology and Social Epistemology: It's Complicated." As a point of departure, Fox reminded us that women are a significant portion of society that must be recognized in any truly "social" epistemology. However, characterizing the nature of women's knowledge (here referred to as feminist epistemology) is complicated. An initial problem, Fox explained, is that woman is a contested concept and may be tied to sex, gender essentialism, gender neutrality, gender existentialism, gender fluidity (a taxonomy provided by Dragseth 2015), or intersectionality (awareness that people associate themselves with innumerable groups) (Fox 2016a). How gender is conceptualized affects the categorization in KO, work taken up, for example, by Olson (2001), Fox (2011, 2016b), and Christensen (2010).

Putting aside the difficulty of defining women, and extending her earlier work on this topic (Fox and Olson 2012), Fox invoked Harding's (1991) spectrum of feminist epistemologies as a framework for engaging Egan and Shera's social epistemology in the context of knowl-

edge organization. One pole of Harding's spectrum is held by feminist empiricists who remain committed to the scientific method yet problematize its gender biases, an approach taken in knowledge organization research, for example, by Olson (1999). At the other end of the spectrum lies postmodern epistemologies that are individualist and reject any form of universal classification in favor of pluralism (Kaipainen and Hautamäki 2011). In the middle of these extremes lies standpoint feminist epistemology, the best candidate for a social epistemology, because it casts women as a collective and has socialist origins. Additionally, they both value inclusivity, recognition of shared informal knowledge, and personal testimony. Standpoint feminist epistemology, Fox continued, entails dual visions: a recognition of the dominant (masculine) perspective and a situated awareness of a women's marginality. Fox returned to her original theme to admit that even standpoint feminist epistemology brings its own complexities to social epistemology and knowledge organization. On a bright concluding note, she offered that the standpoint view, once refined, can be extended beyond women as a collective to any other group that considers itself on the margins.

The final presentation of the day was "The Concept of Time from an Indian Cultural Perspective" by K. S. Raghavan (PES, India). He offered a detailed case study of the concept of time and its associated knowledge structures in Indian culture. Indian culture, Raghavan explained, has a rich conception of time; through its cultural frame, time is not linear but cyclic. Further, some Indian conceptions of time have no parallels in other cultures, such as yuga, the endless cycle of creation, preservation, and destruction of eons. What is more, Raghavan continued, many concepts in Indian culture are orthogonal; that is, they cut across domains. As an example, he noted the temporal concept of taaLa has special meanings in Indian music, dance, art, and architecture. Raghavan argued that these qualities require special strategies during the construction of classification systems native to India. This final presentation suggested that a global social epistemology must sensitively consider the variation in concepts across cultures and the implications for knowledge organization.

At the end of the invited presentations on the first day, progress had been made in answering each of Hjørland's opening questions. There had been definitions of social epistemology from the perspective of Egan and Shera (by Martínez-Ávila and Zandonade), as well as an explication of Fuller's more recent view (by Collin). Several reasons had been given for the application of social epistemology to research in LIS that is historical (by Dick), ethical (by Furner), and foundational to culturally-oriented trends in knowledge organization (by Hjørland,

Fox, Raghavan). The next project for all speakers will be to refine their presentations into manuscripts that will be published in the forthcoming book of the symposium's proceedings.

To help all participants review and integrate the wideranging content shared that day, Jenna Hartel (University of Toronto, Canada) provided summaries of the keynote and invited papers, a contribution that has been extended into the report at hand. In her conclusions, Hartel expressed a desire for the final words from the landmark gathering to be by Jesse Shera himself and she played a rare recording of his voice that readers can listen to on Hartel's personal website (audio recording at http://www. jennahartel.info/shera-audio.html). In the excerpt, Shera is one of three panelists at an event hosted in 1972 at a leftleaning political think tank, the Center for the Study of Democratic Institutions, in California. The presentation includes his use of a remark by mathematician Warren S. McCulloch in which Shera switched out McCulloch's number for book: "What is a book that a man may know it and a man that he may know a book?" Shera also provided this gem about librarianship: "The librarian brings the reader and graphic record together in a meaningful relationship." Elsewhere in his talk, Shera bemoaned our field's lack of understanding of the cognitive processes associated with reading, and he criticized the librarian as isolated. At the end of this excerpt, he introduced social epistemology and asked, "How does society know what it knows?" Note that Shera's formulation of social epistemology at that moment sounds more like information behaviour or scholarly communication than knowledge organization. After hearing Shera's sage words, everyone departed for a cruise around Copenhagen's waterways and a dinner of local delicacies shared over more talk of social epistemology.

The second day of the symposium was an opportunity for doctoral students and junior scholars to receive feedback on their research projects from the experts in attendance. The program on the second day was as follows (presentation titles and abstracts at http://www.webcita tion.org/6vmYdV7jp): Karin McGuirk, lecturer in Information Science, University of South Africa, "The Scientific Basis and Philosophical Frameworks of Information Science"; Robert D. Montoya, Assistant Professor, Indiana University Bloomington," Consensus and Biological Classification"; Praveen Vaidya, PhD student, Tolani Maritime Institute, "Social Epistemology, and Folksonomies: A Case Study of Marine Social Tags"; Suellen O. Milani, University of Sao Paolo, "Non-Neutrality in Knowledge Organization and Some Ethical Issues Inherent to them in Library Science [sic]"; Natália B. Tognoli, University of Sao Paolo, "Archival Science and Knowledge Organization: Some Perspectives"; Filipe F. Zimmermann, PhD student, University of Warwick,

"The Facts of Knowledge and the Knowledge of Facts: A Hayekian Challenge to Steve Fuller's Social Epistemology"; Pallavi Karanth, PhD student, PES University, Bangalore, India, "Knowledge Analytics and its Applications."

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