

Social informatics and social media: Theoretical reflections

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Early social informatics research focused primarily on ethnographic and site-specific observations or was based on limited discourse analysis involving smaller case studies. However, in the last decade, the rise of social media has provided access to large-scale data and made the observation of interaction between people and technologies easier. This trend has informed social informatics perspectives for examining the roles and impacts of social media in our work and social lives. For a number of years now, researchers in social informatics have been concerned about expanding the theoretical depth and richness of the discipline (Sanfilippo and Fichman, 2014; Sawyer and Tyworth, 2006). As studies of social media continue to gain in popularity and move from descriptive to more analytical approaches, researchers are likely to begin to critically reflect on what they are doing and finding and to therefore provide insights into theoretical aspects of social informatics research.

Therefore, the panel will explore the following question:

- In what ways does this type of research make theoretical contributions to social informatics and move the theory development within social informatics forward?

By discussing their research and drawing implications for extending the conceptual and theoretical boundaries of social informatics, the panelists will engage with the above question. They come from a variety of backgrounds and study a range of social media from a variety of perspectives. Given that these scholars all take critical approaches to the questions that drive their work, we expect a lively and interactive session as the panelists raise provocative issues and questions about the ways in which their work impacts and has implications for social informatics theory. In doing so, the panelists will also push the boundaries in ways that broaden the original conception of social informatics. With this panel we hope to attract participants who are new to or unfamiliar with the community of social informatics scholars.

The panelists will present various perspectives on the theoretical advancement of social informatics research by

using individual studies on social media. Kenneth R. Fleischmann will offer an insight that technology designs, especially social media design, are affected by human values. Mohammad Hossein Jarrahi will describe his research on knowledge sharing using social media. Brian Butler will use his research on social media to illustrate how transformational perspective and the large amount of data set contribute to our better understanding of social informatics. Howard Rosenbaum will provide an introduction that will set the context for the panel. Pnina Fichman and Noriko Hara will moderate the panel discussions.

Building on his recent monograph, *Information and Human Values*, as well as his chapter, "Social Informatics, Human Values, and ICT Design," in *Social Informatics: Past, Present, and Future*, (edited by Fichman and Rosenbaum), **Fleischmann** will discuss how human values influence social media design and use from a social informatics perspective. Specifically, he will explore how Rob Kling's research set the stage for values and design research, and how fully embracing values and design research can help to keep social informatics current and relevant. The emphasis on human values allows for building on various rich intellectual traditions across the social sciences, while the emphasis on design helps the research to have practical impact.

Butler will discuss how the amount of data available in social media helps our understanding of social informatics. Social media makes social aspects of information visible, recordable, accessible, and measurable. Whether researchers apply qualitative or quantitative methods, social media provide rich opportunities to develop, describe, and test our theories, concepts, and explanations of social informatics in ways that previously were impractical. In addition, he believes that, while social informatics has taken a big picture view on information and related phenomena, there remains a strong tendency to return to documents, transactions, and individuals as the units of analysis (either empirical or conceptual). Social media challenges us to step up our game and develop theories, concepts, frameworks, measures that can explain larger scale phenomena -- and develop these intellectual constructs in such a way that they are accessible and useful not just for scholars but also for the practitioners who (because of social media) are now aware of the larger scale -- but often lack frameworks they need to communicate, discuss, and take action.

Jarrahi will discuss a study of multiple forms of social technologies and their potential for informal knowledge sharing practices in organizational context. Building from the theoretical lenses of sociomateriality, structuration, and technological frames, the findings from this project advance our understanding of: (1) the ways in which social technologies are used in combination as a suite of tools, (2)

the ways in which organizational norms, policies, and arrangements shape the uses of social technologies for knowledge practices, and (3) the variations in uses of social technologies by different groups of knowledge workers.

PANELIST BIOS

Brian S. Butler is an Associate Professor in the College of Information Studies and in the Robert H. Smith School of Business at the University of Maryland where he is the Director of the Master of Information Management (MIM) Program and the Director of the Center for the Advanced Study of Communities and Information (CASCI). He has worked with online communities and social computing since the mid-1990's. His work, which has appeared in *Information Systems Research*, *MIS Quarterly*, *Organization Science*, *Journal of Biomedical Informatics*, and the *Journal of the Association for Information Science and Technology (JASIST)*, combines theories and methods from organizational theory and management to better understand how emerging technologies alter the way teams, communities, and organization function. Current projects include studies of policy formation and application in Wikipedia, social media use in local food systems, the design of online communities for large-scale education initiatives, and models and metrics for systems of online groups.

Pnina Fichman is an Associate Professor in the School of Informatics and Computing, co-director of the Rob Kling Center of Social Informatics, and the chair of the Department of Information and Library Science. She earned her PhD from the University of North Carolina. Her research in social informatics focuses on the interaction between information and communication technologies and cultural diversity in online communities and virtual teams as well as online deviant behaviors, such as trolling and discrimination; she also studies information intermediation. In addition to her three books, *Social Informatics: Past Present and Future* (with Howard Rosenbaum), *Global Wikipedia: International and Cross Cultural Issues in Online Collaboration* (with Noriko Hara), and *Multiculturalism and Information and Communication Technology* (with Madelyn Sanfilippo), her publications appeared in *Information and Management*, the *Journal of the American Society for Information Science & Technology*, the *Journal of Information Science*, and many other venues.

Kenneth R. Fleischmann is an Associate Professor in the School of Information at the University of Texas at Austin. He double-majored in computer science and anthropology as an undergraduate at Case Western Reserve University, and he received his MS and PhD in Science and Technology Studies at Rensselaer Polytechnic Institute. His research focuses on understanding the role of human values

in the design and use of information technologies as well as developing new approaches for computational social science through collaboration with computational linguists. His research has been funded by nine grants and fellowships from the National Science Foundation (NSF) as well as funding from the Intelligence Advanced Research Projects Activity (IARPA), and has been published in journals such as *Journal of the American Society for Information Science and Technology (JASIST)*, *Communications of the ACM*, *Computer*, and *The Information Society*. His collaborative papers have received the iConference Best Paper Award and the ASIS&T SIG-USE Best Paper Award. He recently published *Information and Human Values* as part of Morgan Claypool's Synthesis Lectures on Information Concepts, Retrieval, and Services series, edited by Gary Marchionini. He is the Director of Doctoral Studies for the iSchool at UT, where he teaches courses in information ethics and the social and cultural dimensions of information and information technology. He serves as an Associate Editor of *The Information Society*.

Noriko Hara is an Associate Professor in the School of Informatics and Computing. Her research in Social Informatics emphasizes online knowledge sharing, communities of practice, and collective behaviors in mediated environments. Specifically, she examines the means by which collective behaviors are enabled and/or impeded by information Technology. She is currently completing an U.S. National Science Foundation funded research project looking at tacit knowledge sharing in life science graduate programs. She is the author of *Communities of Practice: Fostering Peer-to-Peer Learning and Informal Knowledge Sharing in the Work Place* from Springer, and a co-editor of *Global Wikipedia: International and Cross-Cultural Issues in Online Collaboration* (with Pnina Fichman) from Rowman & Littlefield. She received a Ph.D. in Instructional Systems Technology at Indiana University and was a postdoctoral research fellow in the NSF Science and Technology Center at University of North Carolina, Chapel Hill.

Mohammad Hossein Jarrahi is an Assistant Professor at the School of Information and Library Science at the University of North Carolina at Chapel Hill. He is interested in the intersection of information, technology and organizations. Largely influenced by the sociotechnical tradition, his research focuses on the ways information and communication technologies (ICTs) mediate work practices. His doctoral dissertation focuses on the interplay between different social technologies and informal knowledge practices within and across organizations. Currently he studies the ways mobile knowledge workers assemble, arrange, enact and draw on digital infrastructure.

Howard Rosenbaum is the Associate Dean for Graduate Studies and Professor of Information Science in the School of Informatics and Computing at Indiana University, where he has been on the faculty since 1993. He is also a co-director of the Graduate Certificate in Information

Architecture program in the Department of Information and Library Science. Rosenbaum studies social informatics, ebusiness, and online communities, has published in a variety of information science journals and presented at ASIS&T, iConferences, and elsewhere. In 2005, he published *Information Technologies in Human Contexts: Learning from Organizational and Social Informatics* with Steve Sawyer and the late Rob Kling. With Pnina Fichman, he published *Social Informatics: Past, Present, and Future* this spring. Rosenbaum teaches digital entrepreneurship, information systems design, intellectual freedom and other classes. He has been recognized often for excellence in teaching and for the innovative use of technology in education, receiving the 2011 Thomson Reuters Outstanding Information Science Teacher Award from ASIS&T, the 2005 Frederic Bachman Lieber Memorial Award for Teaching Excellence from Indiana University, a 2003 state-wide MIRA Award for Technological Innovation in Education from Techpoint, the 2002 Indiana Partnership for Statewide Education Award for Innovation in Teaching with Technology, and in 2000 was named one of the first SBC Fellows at Indiana University.

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