Changing Socio-cultural Dynamics and Implications for National Security: A Workshop

Committee

Jeffrey C. Johnson

Chair

Jeffrey Johnson is a professor of anthropology at the University of Florida. He is also an adjunct professor in the Institute for Software Research at Carnegie Mellon University. He was director of the Summer Institute for Research Design in Cultural Anthropology from 1996 to 2015. He was also a program manager with the Army Research Office (Intergovernmental Personnel Act), where he started the basic science research program in the social sciences. He has conducted extensive long-term research comparing group dynamics and the evolution of social networks of overwintering crews at the American South Pole Station and at the Polish, Russian, Chinese, and Indian Antarctic Stations. Using these isolated human group settings as space analogs, he is currently studying the role of aspects of team cognition in mission success. He received a Ph.D. in social science from the University of California, Irvine.

Kathleen M. Carley

Member

Kathleen Carley is a professor of computer science in the Institute for Software Research and director of the Center for Computational Analysis of Social and Organizational Systems at Carnegie Mellon University. She is also CEO of Carley Technologies Inc., also known as Netanomics. Her research combines cognitive science, sociology, and computer science to address complex social and organizational issues. Her most notable research contribution was the establishment of dynamic network analysis (DNA) and the associated theory and methodology for examining large high-dimensional time-variant networks. Her research on DNA has resulted in tools for analyzing and visualizing large-scale dynamic networks and various multiagent simulation systems. She is the developer of a high-dimensional network analysis and visualization system, ORA, that supports network analytics in general, for social media, and for dynamic and geospatial networks. Her group has also developed tools for extracting sentiment, social, and semantic networks from social media and other textual data (AutoMap); simulating epidemiological models (BioWar); simulating covert networks (DyNet); and simulating changes in beliefs and practice given information campaigns (Construct). She is a fellow of the Institute of Electrical and Electronics Engineers. Dr. Carley holds a Ph.D. in sociology from Harvard University.

Mark Liberman

Member

Mark Liberman is director of the Linguistics Data Consortium, faculty director of the Ware College House, Christopher H. Browne distinguished professor of linguistics in the Department of Linguistics, and professor in the Department of Computer and Information Science at the University of Pennsylvania. His research focuses on corpus-based phonetics; speech and language technology; the phonology and phonetics of lexical tone and its relationship to intonation; gestural, prosodic, morphological, and syntactic ways of marking focus and their use in discourse; formal models for linguistic annotation; information retrieval and information extraction from text; the organization of spoken communication in the human brain, especially in relation to the evolutionary substrates for speech and language and to analogous systems in other animals; and agent-based models of language evolution and learning. His early research established the linguistic subfield of metrical phonology. Much of his current research is conducted through computational analyses of linguistic corpora. He is the recipient of several awards in the field of linguistics. He received his M.S. and Ph.D. in linguistics from the Massachusetts Institute of Technology.

David Matsumoto

Member

David Matsumoto is a professor of social psychology at San Francisco State University and director of the Culture and Emotion Research Lab, which focuses on studies involving culture, emotion, social interaction, and communication. He is well known for his work in the field of microexpressions, facial expression, gesture, and nonverbal behavior. He holds a Ph.D. in psychology from the University of California, Berkeley.

Joy Rohde

Member

Joy Rohde is an assistant professor at the Gerald R. Ford School of Public Policy, University of Michigan. She is also a faculty member with the Science, Technology, and Society Program and the Department of History. Her work examines the relationship between the social and behavioral sciences and the American state from the late 19th century to the present. She is currently working on a book project that explores how ideas about cybernetics and advances in computing have impacted the social sciences, policy analysis, and national security in the United States since the 1960s. Prior to joining the Ford School, Dr. Rohde was an assistant professor of history at Trinity University, and she has held fellowships from the Miller Center of Public Affairs and the American Academy of Arts and Sciences. She received a Ph.D. in history and sociology of science from the University of Pennsylvania.

Susan Weller

Member

Susan Weller is a professor in the Division of Sociomedical Sciences in the Department of Preventive Medicine and Community Health and director of the research program in the Department of Family Medicine at the University of Texas Medical Branch. She is recognized nationally and internationally for her expertise in the area of research methods and is skilled in both qualitative and quantitative methods. Her research interests span topics in both medicine (diabetes, AIDS, and asthma) and the social sciences (social support, stress, and folk illnesses). Dr. Weller is co-developer of the Cultural Consensus Model, a mathematical method for estimating cultural beliefs. She has served on a number of expert scientific advisory committees and boards, including a consensus panel to summarize research concerning condoms and sexually transmitted diseases. She received a B.A. and Ph.D. in social science from the University of California, Irvine.