December 2005

Cultural Bias in Information Systems Research and Practice: Are You Coming from the Same Place I Am?

Roberto Evaristo
University of Illinois at Chicago

David Pauleen
Victoria University of Wellington

Robert Davison
City University of Hong Kong

Soon Ang
Nanyang Technological University

Sherif Kamel
American University in Cairo

See next page for additional authors

Follow this and additional works at: http://aisel.aisnet.org/icis2005

Recommended Citation

Evaristo, Roberto; Pauleen, David; Davison, Robert; Ang, Soon; Kamel, Sherif; and Alanis, Macedonio, "Cultural Bias in Information Systems Research and Practice: Are You Coming from the Same Place I Am?" (2005). *ICIS 2005 Proceedings*. 75.
http://aisel.aisnet.org/icis2005/75

Authors

Roberto Evaristo, David Pauleen, Robert Davison, Soon Ang, Sherif Kamel, and Macedonio Alanis

CULTURAL BIAS IN INFORMATION SYSTEMS RESEARCH AND PRACTICE: ARE YOU COMING FROM THE SAME PLACE I AM?

Chairs:　**Roberto Evaristo**, University of Illinois at Chicago, USA (**evaristo@uic.edu**)
David J. Pauleen, Victoria University of Wellington, New Zealand (**david.pauleen@vuw.ac.nz**)

Panelists:　**Robert Davison**, City University of Hong Kong, China (**isrobert@cityu.edu.hk**)
Soon Ang, Nanyang Technological University, Singapore (**asang@ntu.edu.sg**)
Sherif Kamel, American University of Cairo, Egypt (**skamel@aucegypt.edu**)
Macedonio Alanis, Instituto Tecnológico y de Estudios Superiores, Mexico (**alanis@itesm.mx**)

Introduction

Cultural values, attitudes and behaviors prominently influence how a given group of people view, understand, process, communicate, and manage data, information, and knowledge. Cultural differences can be understood as cultural bias, a bias so deeply ingrained that it is unconscious, unless explicitly examined.

Culture has been defined as a kind of collective programming of the mind that distinguishes the members of one group from another (Hofstede 1984). In essence, the content of culture consists of a set of underlying norms and values of behavior, shared by a group of people tied together by powerful affiliations or bonds. It has been argued that the considerable social differences that exist among cultures affect, among other things, tacit epistemologies (theories of knowledge, including what counts as knowledge and degrees of certainty about knowledge) and the nature of cognitive processes—the ways by which people know the world (Nisbett et al. 2001).

For example, traditional Chinese cognition has been termed *holistic*, while ancient Greek culture has been termed *analytic* (Nisbett et al. 2001). Holistic thought involves an orientation to the context or field as a whole and a preference for explaining and predicting events based on the existing relationships. Analytic thought is defined as detaching the object from its context, focusing on the object's attributes, assigning it to categories, and using rules to explain and predict the object's behavior. These cognitive patterns have tended to persist into modern times.

However, it has been claimed that the previous, standard, anthropologically derived concepts of culture are out of touch with the *connectivities* and networks of the modern global economy (Barnham and Heiner 1998). Recent and compelling IS research highlights the active role of people interacting with the emergent, contested and ongoing nature of culture, and people's reactions to dynamic, situated contexts (Meyers and Tan 2002; Walsham 2002; Weisinger and Trauth 2002). As a result, there have been calls for a paradigmatic shift in the way culture is viewed.

These contrasting views on culture have been mirrored in recent discussions about cultural convergence and divergence. At their extremes, *convergence* is the notion that globalization and technology are driving the world's cultures together into a single culture, while *divergence* is resulting in local cultures' circling the wagons to try and hold onto what they value.

Given the potential impact of culture on the understanding and processing of information and knowledge, the consequences for IS research and practice are clearly evident. The objective of this panel is to debate whether cultural bias is indeed an important issue and, if so, to explore the consequences as they relate to IS research and practice.

Cultural Bias in Information Systems Research

Likewise, in IS research, we need to investigate how the cultural bias, that must certainly exist in IS researchers, affects research. Cultural values, attitudes, and behaviors affect a researcher's understanding, processing, and analysis of data and information; therefore, it is reasonable to suppose that researchers—as an intellectual product of a particular culture—may be producing culturally biased research. This would particularly be the case when researchers are working across cultural boundaries such as in global IS, cross-cultural research, and any research that involves multicultural research populations. Questions that arise include

- Is IS research inherently biased in favor of a particular way of understanding, processing and evaluating information, and knowledge?
    - If so, what are the ethical and practical consequences of such biased research?
    - How does positivism versus interpretivism align with such differences in cultural biases?

- What can researchers do to ensure that cultural bias in research is minimized or at least taken into consideration from research design and implementation to analysis and publication?
    - This is the globalization or at least the cultural agglomeration perspective (i.e., we may need to ensure that there is no bias because we see the development of a single standard). Alternatively, if cultures are becoming more deeply entrenched, then perhaps cultural bias is not even an issue.

Cultural Bias in Information Systems Practice

Given that information technology, information systems, information management, and now knowledge management are all concerned at some level with the processing and management of information and knowledge, the question needs to be asked, to what extent do the often unrecognized cultural biases of IS designers and developers influence the information systems they develop? When a great majority of information systems design occurs in just a few cultural or subcultural milieus, such as Silicon Valley, we need to investigate whether such systems are the most appropriate for people outside these milieus.

If the supposition that cultural bias affects systems design and development is correct, a number of practical and ethical questions are raised. These include, but are not limited to,

- How do built-in cultural biases in information systems affect users who do not share those biases?

- What are the ethical issues associated with compelling or requiring users to think and work in culturally incongruent ways?

The goal of the panel is to articulate these issues and to offer some preliminary approaches to addressing them.

Participants

Each of the participants brings their own unique perspective to this panel presentation. These perspectives are shaped by culture, personal experience, and predilection, as well as academic training.

Moderators

Roberto Evaristo is on the faculty of the University of Illinois at Chicago. He is the founder and head of the AIS-sponsored SIG Cross-Cultural Research in Information Systems and has written many papers in this area in outlets such as *Communications of the ACM, IEEE Transactions in Engineering Management*, and *Journal of Technology and Engineering Management*. He is also an associate editor for *Journal of Global Information Management* and *International Journal of e-Collaboration* and serves on the editorial boards of *Information Technology and People* and *Journal of Global Information and Technology Management*.

David J. Pauleen is a senior lecturer at Victoria University of Wellington in New Zealand. He is currently researching cross-cultural issues in knowledge management in a comparative study with a colleague in Taiwan. He has published in a number of journals including *Sloan Management Review, Journal of Management Information Systems*, and *Journal of Global Information Management.* He is currently editing the book, *Cross-Cultural Perceptions of Knowledge Management.* He is a member of SIGCCRIS and an associate with the Centre for Applied Cross-Cultural Research. He has spent more than 20 years living and working outside New Zealand.

Participants Focusing on Information Systems Research

Robert Davison is an associate professor in Information Systems at the City University of Hong Kong and editor-in-chief of *Electronic Journal of Information Systems in Developing Countries.* He was guest co-editor of a special issue of *IEEE Transactions on Engineering Management* on Cultural Issues and IT Management and frequently publishes culturally informed papers in journals such as *Communications of the ACM* and *Information & Management.*

Soon Ang is T. K. Goh Endowed Chair in Management & IT and the Executive Director for the Center for Cultural Intelligence (CCI) at Nanyang Business School, Nanyang Technological University, Singapore. She is a senior editor of *Journal of the Association of Information Systems,* an associate editor of *Information Systems Research, & Decision Sciences*, and on the editorial boards of several other journals. Her papers have appeared in numerous journals. Her research includes IT outsourcing, managing IT professionals, and international organizational behavior. She coauthored a book on the theory of cultural intelligence (Early and Ang 2003) and has a recent paper on measuring cultural intelligence (Ang et al. 2004).

Participants Focusing on Information Systems Practice

Sherif Kamel is an associate professor of management information systems and the Director of Institute of Management Development, School of Business, Economics and Communication, American University in Cairo, Egypt. He has published extensively on issues around IT transfer to developing countries. He is the associate editor of *Journal of Cases on Information Technology* and *Journal of Information Technology for Development.*

Macedonio Alanis is a professor of Management Information Systems, Instituto Tecnológico y de Estudios Superiores, Monterrey, Mexico, and one of the AIS Council representatives for the Americas. He combines experience and expertise in government, industry, and higher education in his leadership in the field of Information Technology in Mexico. He has a long-standing interest in culture and IT.

References

Ang, S., Van Dyne, L., Koh, C., and Ng. K. Y. "The Measurement of Cultural Intelligence," paper presented at the Symposium on Cultural Intelligence, Academy of Management Meetings, New Orleans, LA, August 2004.

Barnham, J., and Heiner, C. *ABB: The Dancing Giant—Creating the Globally Connected Corporation,* Financial Times Prentice Hall, London, 1998.

Earley, P. C., and Ang, S. *Cultural Intelligence: Individual Interaction Across Cultures*, Stanford University press, Palo Alto, CA, 2003.

Hofstede, G. *Culture's Consequences: International Differences in Work Related Values*, Saga, Beverly Hills, CA, 1984.

Myers, M., and Tan, F. "Beyond Models of National Culture in Information Systems Research," *Journal of Global Information Management* (10:1), 2002, pp. 24-32.

Nisbett, R. E., Peng, K., Choi, I., and Norenzayan, A. "Culture and Systems of Thought: Holistic Versus Analytic Cognition," *Psychological Review* (108:2), 2001, pp. 291-310.

Walsham, G. "Cross-Cultural Software Production and Use: A Structurational Analysis," *MIS Quarterly* (26:4), 2002, pp. 359-380.

Weisinger, J. Y., and Trauth, E. M. "Situating Culture in the Global Information Sector," *Information Technology & People* (15:4), 2002, pp. 306-320.