Brief Bio and (PR)^2: Problems & Pitches – Rants & Raves by *Noshir Contractor*

Self Introduction

Noshir Contractor is the Jane S. & William J. White Professor of Behavioral Sciences in the School of Engineering, School of Communication and the Kellogg School of Management at Northwestern University, USA. He is the Director of the Science of Networks in Communities (SONIC) Research Group.

He is investigating factors that lead to the formation, maintenance, and dissolution of dynamically linked social and knowledge networks in communities. Specifically, his research team is developing and testing theories and methods of network science to map, understand and enable more effective (i) disaster response networks, (ii) public health networks, (iii) massively multiplayer online games (MMOs) networks. His research program has been funded continuously for the past decade by major grants from the U.S. National Science Foundation with additional funding from the U.S. National Institutes of Health (NIH), U.S. National Aeronautics and Space Administration (NASA), the Rockefeller Foundation, and the MacArthur Foundation.

Professor Contractor has published or presented over 250 research papers dealing with communication. His book titled *Theories of Communication Networks* (co-authored with Professor Peter Monge and published by Oxford University Press in English and scheduled to be published by China Renmin University Press in simplified Chinese in 2007) received the 2003 Book of the Year award from the Organizational Communication Division of the National Communication Association. He is the lead developer of *IKNOW* (Inquiring Knowledge Networks On the Web), and its Cyberinfrastructure extension *CI-KNOW*, a network recommender system to enable communities using cyberinfrastructure, as well as *Blanche*, a software environment to simulate the dynamics of social networks.

Publications

Monge, P. R., & Contractor, N. (2003). *Theories of Communication Networks*. New York: Oxford University Press.

Vogenbeck Varda, D., R., Forgette, R., Banks, D., & Contractor, N. (in press). Social network methodology in the study of disasters: Issues and insights prompted by post-Katrina research. *Population Research & Policy Review*.

Contractor, N., Wasserman, S., & Faust, K. (2006). Testing multi-theoretical multilevel hypotheses about organizational networks: An analytic framework and empirical example. *Academy of Management Review*, 31, 681-703.

Palazzolo, E. T., Serb, D., She, Y., Su, C., & Contractor, N. S. (2006). Co-evolution of communication and knowledge networks as Transactive Memory systems: Using computational models for theoretical integration and extensions. *Communication Theory, 16*, 223-250

Katz, N., Lazer, D., Arrow, H., & Contractor, N. (2004). Network theory and small groups. *Small Group Research*. 35: 307-332.

http://nosh.northwestern.edu/

http://sonic.northwestern.edu/software.htm

General Questions

1) What is (are) your main interest(s) in attending the workshop?

To exchange ideas and insights with colleagues who are working on novel approaches to harvest, manage, model, and visualize large-scale social and knowledge networks**.**

2) What information/knowledge management expertise do you have?

Capturing, modeling, and enabling social and knowledge networks culled from diverse sources – individual surveys, computer logs, digital repositories (such as bibliographic, patent, funding databases), text-mining and web-crawling tools.

3) What is the most insightful visualization of static or dynamic phenomena you know?

4) What would you like to learn / achieve at the workshop?

I would like us to discuss the merits and challenges of an "open-source" platform that would provide network researchers the ability to access network datasets (wherever they might be located or wherever they might be generated in real time), visual-analytic tools (wherever they might be hosted) . In addition, I would like to discuss the challenges in creating workflows that would allow us to take, say, a network data set being generated by a web-crawling tools in Canberra, Australia, analyze it using an analytic tool hosted in visualization tool developed in Bloomington, IN data, and run it using distributed computing resources on the TeraGrid.