

# Research Framework on Meta-synthesis System Approach toward Complex Problems

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## **Abstract:**

This talk at first briefly address some research topics on meta-synthesis systems approach by Meta-synthesis and Knowledge Science group at CAS Institute of Systems Science during the past 20 years which also illustrate the working process of MSA.

Then we address how to apply MSA to a big issue, how to measure a harmonious society, a societal system problem. Several indicators of harmonious society measurement are briefly addressed, while disadvantages are existed. As current China is undergoing great social transformations and facing tremendous emerging wicked problems across environment, food safety, governance, health, inequalities, national security, population, urbanization, etc. which cover every aspects of social living and timely expose to the public via hot search news, BBS posts, blogs and microblogs, especially in Web 2.0 era. We explore to map those on-line community concerns into respective societal risks and aggregate all risks so as to achieve on-line societal risk perception, as one augment way to traditional social psychological approach. Basic ideas and 5-year research results are briefly addressed.

## Presenter's Bio:

**Xijin Tang** received her Bachelor's degree in computer science and engineering from Zhejiang University in 1985, Master's degree in management science and engineering from the University of Science and Technology of China in 1992, and Doctoral degree in management science and engineering from the Institute of Systems Science, Chinese Academy of Sciences in 1995. Currently she is a Full Professor with the Lab on Management, Decision Making and Information Systems, CAS Academy of Mathematics and Systems Science. She developed several decision support systems for water resource management, weapon system evaluation, e-business evaluation, etc.

during her early system research and practice. Her recent research interests include meta-synthesis and advanced modeling, opinion dynamics, systems approaches to societal complex problems, knowledge creation and creativity support systems. She co-authored and published two influential books on meta-synthesis system approach and an oriental system approach in Chinese. She has organized the International Workshop on Meta-synthesis and Complex Systems (MCS) for 15 years. She was one of 99 who won the 10th National Award for Youth in Science and Technology in China in 2007. Now she is the vice president and general secretary of the International Society for Knowledge and Systems Sciences, member of the editorial board for the *Journal of Systems Science and Complexity* (Springer) and *Journal of System Science and Mathematical Science* (Chinese series), associate editor of *Journal of Systems Engineering*.