Education, Design and Practice – Understanding skills in a Complex World

• Paper / Proposal Title:
  Roleplaying to Improve Resilience

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• Abstract (300 words):
  During extreme events, functional dynamics among elements in urban systems may change. Understanding possible actions by key stakeholders to adapt can contribute to crisis planning. This paper presents an exercise that asked graduate students to explore such dynamics through a roleplaying game and then propose options to improve resilience.

  The exercise extended the Archaria 2035 Scenario and GIS model, which was developed by NATO to advance concepts that support military operations, including disaster response, civil support, and counter-terrorism. Assessment of one exercise highlighted the need for a greater ability to examine possible relationships among civilian stakeholders.

  Students worked in teams to identify and map critical relationships related to health, safety, and welfare. Then, each student was given a 1-page stakeholder profile that specified motives, kinds and degrees of influence, and connections to other stakeholders and made a map that showed how his/her character understood the city. Crisis event details were revealed the day before the exercise. At the exercise, NATO staff participated by presenting courses of action to restore security and order. Students gave opinions about how their characters might act during the event and
react to the proposed military operations. Conversations created temporary collaborations among some stakeholders, but also conflicts among others that could create additional security problems. NATO personnel also provided comments throughout the exercise. A post-exercise assignment asked students to write memos on specific policies and plans that would have reduced vulnerability to the crisis.

As a matter of pedagogy, results of the exercise demonstrate the value of roleplaying to consider multiple perspectives and second- and third-order effects of the crisis. Specifically, connecting gameplay conversations and results back initial ideas about health, safety, and welfare contributed to reconsiderations of assumptions about contingent relationships.

• Author(s) Biography (200 words each):

Allan W. Shearer, Ph.D., is Associate Dean for Research and Technology at The University of Texas at Austin School of Architecture. In his role at the School's Center for Sustainable Development, he oversees the development and facilitation of research at the intersection of environmental, social, and economic concerns. His own research centers how individuals, communities, and societies create scenarios of the future and how these descriptions of possible conditions are used to inform present day decisions. With an emphasis on issues relating to the built environment, his work expands conceptual frameworks for scenario-based studies and advances methods by which they are put into practice. A particular focus of research has been critical uncertainties that may lead to national, environmental, or human security problems. Since 2015, he has served as a subject matter expert for the NATO Urbanization Program and contributed content for a scenario and GIS model of a technologically advanced, but socially challenged city in the year 2035.