



In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy **Braden Ryan Kay**

Will defend his dissertation

Developing and Testing Transition Strategies for Urban Sustainability: Case Studies in Transition Research in Phoenix, Arizona

Sustainability challenges with severe local to global impacts require fundamental shifts in what industrial societies aspire to, generate, consume, and represent, as well as how they function. Transition governance is a promising framework to support these transformational efforts. A key component of transition governance is the construction of transition strategies, i.e., action schemes for how to transition from the current state to a sustainable one. Despite significant accomplishments in building theory and methodology for transition governance, the specifics of what transition strategies and how they relate to specific interventions are undeveloped.

This dissertation further defines the necessary content of a transition strategy, and explores how different stakeholder groups and allies can develop and test transition strategies on different scales to address critical urban sustainability challenges. The objective is address the research question, how can a city build and implement a comprehensive transition strategy across different urban scales (from the city to the organizational level)?

The dissertation comprises of four studies that explore the dynamic between transition strategies and experiments at the city, neighborhood, and organizational levels with empirical examples from Phoenix, Arizona. The first study This aims to cumulatively review and compare paradigms of intentional change, including transition governance, backcasting, intervention research, change management, integrated planning, and adaptive management, in order to offers a rich set of converging ideas on what strategies for intentional change towards sustainability entail. The second study proposes a comprehensive concept of transition strategies and illustrates the concept with the example of urban sustainability strategies created in partnership with the City of Phoenix Planning Department. The third study uses the implementation of The Valley of the Sunflowers Project to identify the processes necessary to develop sustainability transition experiments, which is one form of strategic intervention. The

fourth study looks at the role of organizations in initiating urban sustainability transitions through strategies and experiments implemented at Phoenix Union Bioscience High School.

The four studies combine to illustrate the strategy components and processes necessary to initialize and support urban sustainability transitions. Through carrying out and analyzing these efforts in the city of Phoenix, this research provides a roadmap for how a city can improve urban sustainability that starts with comprehensive evidence-based strategy building that results in coordinated activities in neighborhoods and organizations throughout the city. While, this research is at a nascent stage, it provides the frameworks and initial empirical examples to build a mature research field of sustainability transition strategy building and implementation that can support urgently required urban sustainability transitions.

Monday, November 19, 2012
10:00 am
Memorial Union, 242 (La Paz)

Faculty, students, and the general public are invited.

Supervisory Committee:
Dr. Arnim Wiek (Chair)
Dr. Derk Loorbach
Dr. Daniel Schugurensky
Fern Tiger