Critical Urban Ecology: Links to Social Vulnerability and Environmental Justice in the Aftermath of Hurricanes

The world is becoming increasingly urban. Parallel to this rising urbanization trend, shifting patterns of large wet weather disturbances – more specifically, hurricanes – are raising concerns in coastal areas, where many of these cities are located. For example, Hurricane Katrina in 2005 destroyed much of the Gulf coast of Mississippi, taking with it much of the rich history and culture embedded within African American neighborhoods in New Orleans. While physical infrastructure was especially damaged by the saltwater, unforeseen social impacts are still being felt by particular communities 12 years later. These hurricanes are set to happen in urban areas more often as global climate changes, making a shift in studying these occurrences paramount.

This thesis addresses the following question: in what ways can the inclusion of social vulnerability studies and environmental justice, often developed outside of the field of urban ecology, contribute to a critical understanding of urban socioecological uncertainties following hurricanes? To answer this question, this thesis reviews the literature on urban ecology and examines how scholarship that emphasizes justice, vulnerabilities, and spatialities can expand the field’s applicability to the study of natural disasters. In this thesis, I make claims for building a critical urban ecology, which includes an integrated, holistic, and critical understanding of the social, economic, biogeophysical, and built parts of urban systems. I then provide ways critical urban ecology can be operationalized through two case studies. Engaging in this critical analysis process, I aim to contribute to the growth of the field of urban ecology.