**Path Dependence in Geographic Crime Patterns**

PhD Dissertation

Department of Criminology & Criminal Justice  
University of Missouri – St. Louis

Theodore S. Lentz

**Abstract**

This dissertation argues that status quo bias in crime location choice has substantial effects on geographic crime patterns. Offenders often re-select prior crime locations when they commit crimes. Mainstream theories argue this is because such locations are objectively more suitable for crime and thereby attract offending behavior at higher rates. I contend that locational suitability is only one consideration and that offenders may re-select a location that has been established as a status quo option, despite availability of more optimal alternatives. When individuals re-select prior crime locations, crimes will increasingly concentrate and create hotspots that are stable over time and resistant to location change. These propositions are tested in two parts. First, I analyze a sample of 9,527 crimes occurring in St. Louis, Missouri (2017-18) to show how prior crime locations have higher odds of being selected than alternatives, net of observed and unobserved locational suitability factors. Second, I build an agent-based model to simulate the crime location choice process. Two experiments are conducted on the model to compare macroscopic patterns under different decision making assumptions. The first experiment shows that aggregate crime patterns are more concentrated and stable over time when offenders have a status quo bias. The second experiment shows that crime hotspots are resistant to locational change when offenders have a status quo bias, and that person-based and network-based interventions are necessary to override the history effects. The combined results suggest that status quo bias is present in offender decision making, and it is sufficient to generate concentrated, chronic crime problems. Crime policy should be cautious of the potential limits of place-based crime reduction strategies and consider person-based and network-based approaches as possible alternatives.