The School of Economic, Political and Policy Sciences
Program Research Activity Newsletter
December, 2014

Criminology
Tomislav Kovandzic, Associate Professor of Criminology
Patrick Brandt and Tomislav Kovandzic are currently working on a paper revisiting a claim by Land and colleagues (2009) that executions in Texas from 1994 to 2005 resulted in a significant reduction of 1.3 homicides in the first month following an execution, with an additional reduction of 1.2 homicides occurring 4 months later—for a total deterrent effect of 2.5 homicides per execution. In the view of Dr. Kovandzic and Dr. Brandt, Land et al.’s decision to first difference the execution and homicide series without formally testing for the presence of trends lead to incorrect inferences about their key results. The paper is entitled “Messing up Texas?: A Re-analysis of the Effects of Executions on Homicides” and is currently under review at PLoS One.

Geospatial Information Sciences
Fang Qiu, Professor of Geospatial Information Sciences
Dr. Fang Qiu’s recent research focused on the fusion of imagery and LiDAR based on curve matching. Fine-scale geospatial information is essential for a variety of applications, especially in urbanized areas. The advent of hyperspectral, LiDAR and high spatial resolution sensors have provided greater potential to extract more accurate and detailed geospatial information, but also posed great challenges for traditional image processing methods. Fusing of these data in order to take advantage of the best spatial, spectral and vertical resolutions they offer is even more challenging. First, they all have different data structure. Second, there is also a lack of common methodology that can be applied to these disparate data because each of these new sensors currently utilizes unique algorithms specifically designed for their data product. Consequently, the fusion of remotely sensed imagery and LiDAR is often conducted in an ad hoc fashion. A remote sensing theory that can guide the fusion of data from these different new generation sensors is therefore very much needed. To address these challenging issues, Dr. Qiu proposes a theoretic framework with associated methodology that aims to advance remote sensing theory for Fusion of Imagery and LiDAR based on curve Matching (FILM). The specific objectives of this proposed research are:

1) Developing a theoretic framework for data fusion of disparate sources based on a novel concept “curve”, a commensurate variable that can be obtained from LiDAR and imagery.

2) Defining compatible processing units for pixel and object level fusion so that curves from various sources can be derived and fused for LULC classification and feature extraction.

3) Devising two curve matching strategies and exploiting reference curve selection and hybrid neuro-fuzzy training method to improve their generalization ability.
4) Building a library of curve-to-curve matching algorithms through cross-fertilization to provide a set of curve matching classifiers for fused as well as individual data.

A proposal based on Dr. Qiu’s ideas has been submitted the NASA to respond to its ROSES Remote Sensing Theory (RST) for Earth Sciences solicitation. Two papers reporting the preliminary findings have been published in International Journal of Remote Sensing and ISPRS Photogrammetry and Remote Sensing respectively.

**Political Science**

**Linda Keith, Associate Professor of Political Science**

Linda Camp Keith has a forthcoming article titled “Second-Order and Evaluations of the European Court of Human Rights: How Much Do the British Trust the European Court of Human Rights?,” which will appear in the *Journal of Law and Courts*, which was co-authored by Banks Miller and Rachel McGuire. Professors Keith, Miller, and McGuire, argue that there a different opinion-forming process for public support of international courts than national courts. Additionally, they find evidence that supports this hypothesis in regard to the British public and the European Court of Human Rights (ECtHR). Scholars have found that citizens tend to evaluate European institutions in light of how they feel about their own domestic institutions (second-order evaluations). They argue that this approach is more appropriate for understanding international courts than is the legitimacy approach of the law and courts literature. While studies applying the second-order evaluations approach have overwhelmingly focused on EU institutions, Keith et al. examine whether second-order evaluations are also characteristic of citizens’ opinions about the ECtHR using a sample of the British population and they subsequently find strong support for the general second-order evaluation and no support for the law and court’s legitimacy approach.

**Public Policy and Political Economy**

**Jonas Bunte, Assistant Professor of Public Policy and Political Economy**

Jonas Bunte is analyzing whether bilateral loans act as 'door-openers' for subsequent investments from companies of the respective creditor countries. For example, does a Chinese loan buy political “goodwill” on part of the recipient government, affecting the likelihood that concessions necessary for investment projects are granted to Chinese (as opposed to US) companies? Using a new dataset on bilateral loans to developing countries, as well as micro-level data on foreign investment in developing countries, Dr. Bunte has found that bilateral loans do act as door-openers. In fact, this has been true for not only for China, but also for France, Japan, and the United States.

**Public Affairs and Sociology**

**Sarah Maxwell, Associate Professor of Public Affairs**
Sarah Maxwell has recently published an article entitled “Stakeholder communication in Service Implementation Networks: Expanding Relationship Management Theory in the voluntary sector” in the International Journal of Nonprofit and Voluntary Sector Marketing along with Julia Carboni. On the article, Dr. Maxwell writes:

Over the last two decades, scholars have documented increased use of organizational networks to deliver government funded services (Alter & Hage, 1993; Austin, 2000; Milne, Iyer, & Gooding-Williams, 1996; Milward & Provan, 2000; Provan, Isett, & Milward, 2004). Organizational networks are a set of three or more organizations with ties, or relationships, among the organizations; relationships represented by ties vary by context (Brass, Galaskiewicz, Greve, & Tsai, 2004). In this study, we focus specifically on communication practices in Service Implementation Networks (SINs). SINs are organizational networks funded by government to deliver services to clients (Milward & Provan, 2006). Increasingly government also contracts out management of SINs to nongovernmental organizations, resulting in a shift of administrative responsibility (Milward & Provan, 2000).

This study examined how youth development organizations, operating in networked-groups under federal contracts to deliver services, employ social media as management tools to more effectively communicate. Communicating with stakeholders within a SIN (i.e., a group of nonprofits serving youth under one contractual arrangement) is hypothesized to involve different forms of communication than communicating with stakeholders outside of the network. In this paper, Relationship Management Theory is used to examine strategic communication with stakeholder groups within and outside of SINs. Both traditional and emergent (e.g. – social media) forms of communication are examined. Survey and interview data on communication within and outside communication networks are analyzed using organizational network analysis techniques. The findings indicate strategic communication in the network differs from strategic communication with stakeholders outside the network. Within the network, organizations place varying emphasis on the use of traditional and emergent forms of communication for management, implying nonprofit managers funded under government grants continue to rely on face-to-face and phone communication and have yet to adopt emerging communication strategies to assist in the management of their programs. Government and government-funded nonprofits may be slow to adopt new technologies, as communication strategies tend to be left to college interns and others who hold no management functions within the organization. Incorporating social media into the larger organizational strategic plan may lead to more effective and efficient communication among stakeholder groups, both internal and external to the networks.