

## PROPOSED PLAN OF RESEARCH

**Title:** Event-Data Solutions for Monitoring Authoritarianism and Predicting Conflict Behavior

**Key Words:** Authoritarianism, Conflict, Event-Data, Regime Type, Institutions

**Hypotheses:** *proximity to an independent electoral party and military significantly decreases the likelihood of fighting domestic conflicts, which in turn reduces interstate dispute likelihood*

**Research Plan:** A widely accepted theory in the conflict literature is the “democratic peace” proposition, which concerns the predominance of peace among democracies. Scholars have modified peace arguments to explain how the behaviors of non-democracies differ (Lai and Slater 2006; Peceny et. al. 2002). Scholars disagree, however, over how to classify authoritarianism. The Polity IV project offers a popular measure of regime type, but it presents special difficulties for measuring autocracies (Casper and Tufis 2003; Gleditsch and Ward 1997). Scholars also challenge Geddes’ (2003) classification of personalist, military, and single-party regimes (Lai and Slater 2006). The available data do not adequately demonstrate how leaders interact with *multiple* actors, which my project seeks to resolve using event-data methodology. Although the data can be applied to myriad research questions, I am firstly concerned with relating regime type to conflict. Importantly, my approach to data generation offers tremendous returns to crisis monitoring systems and policy-relevant research. My goal is a framework for forecasting regime behavior based on the interactions of domestic actors. Immediate benefits of my project include much-needed data on regimes, advancing new methodologies in political science, and explaining conflict behavior. Broader impacts include collaboration with non-Ph.D. granting institutions and overseas research facilities, and assistance in crisis monitoring.

My proposed project stems from the Penn State Event Data Project and utilizes TeraGrid computing to generate event-data on regime behavior. My use of TeraGrid will be for high-speed recoding of a large number of texts in order to experiment with classification schemes; and for running computationally-intensive pattern-recognition algorithms to convert qualitative material into quantitative data. Every step in the data-generation process has the potential to improve education and research. One by-product of the process is a preliminary dataset of chronologically-sorted headlines, by which one can quickly identify newsworthy events. This provides useful source material for comparative research. I will publish this information in country-timeline format on a server jointly maintained with Clemson University. For my purposes, the qualitative data will be computationally sorted, filtered, and quantified. This will require assistants to develop filtering dictionaries and monitor data output. Their involvement will allow them to develop skill sets and encourage them to undertake personal research. The resulting dataset will quantify the frequency with which a leader interacts with domestic actors (e.g. labor groups, the military) and the degree of autonomy granted to them. The new data will illustrate complex regime dynamics and predict leader behavior with newfound precision.

Secondly, my project seeks to apply the event-data approach to political science in new ways. The event-data approach is still limited in the field. It fares substantially better in the policy community, but the classified nature of intelligence material prevents analysts from sharing information (Schrodt 2006). Moreover, the profitability of event data discourages analysts from collaborating. In contrast, my project relies on publicly-available information. My coding scheme is not as subjective as others, producing data based on automated filtering criteria. Moreover, others can modify my program to develop their own datasets in rapid time; the information by which to do so will be accessible online. The importance of developing event-data methodology in political science is underscored by the observation that DARPA's Integrated Conflict Early Warning System (ICEWS) project has produced event data-based models that achieve over 80-percent accuracy in out-of-sample tests in predicting political

## PROPOSED PLAN OF RESEARCH

instability (O'Brien 2010). Developing the approach will also support the study of subjects for which there are few or no cross-sectional time series data.

Of personal interest to me is how political institutions attract domestic challengers and affect international conflict behavior. Scholars argue that personalist regimes are more conflict-prone because they are unconstrained, while others have pointed to the lack of institutionalization in military regimes (Lai and Slater 2006; Peceny et. al 2002). I will estimate the proneness of authoritarian regimes to interstate and intrastate conflicts using simultaneous equations. Regime type is the explanatory variable, for which I will use the new data from my project and check them against existing regime data. The outcome variables are armed conflict and militarized interstate disputes (MIDs), which come from Uppsala/PRI and MID 3.0 datasets. My controls will come from Hegre and Sambanis (2006) and also include standard measures of capabilities. A leader's proximity to an independent electoral party and military should significantly lessen his/her likelihood of observing domestic and interstate conflict. Conversely, regimes which lack a self-enforcing military and an institutionalized political party invite domestic challenges that reinforce international tensions. The project aims to reconcile debates on regime behavior and save lives by more precisely informing policy makers.

My unique position and research experience qualifies me to use novel methodology to produce new data and evaluate regime behavior. Survey work in Ecuador endowed me with some credibility to scrutinize material on events in Latin America, which is the restricted sample that I will use to develop a filter dictionary. My focus is of particular interest to SOUTHCOM, which seeks to develop event-data for crisis prediction in Latin America. At the Pennsylvania State University is Dr. Phil Schrodt, head of the Penn State Event Data Project. I will draw from his expertise on linguistic coding and nominal-level time series techniques, and from Dr. Burt Monroe, whose analyses of legislative speeches have led new text-analysis techniques. Dr. Joseph Wright has worked extensively on Geddes' data and will supervise my efforts to construct continuous measures of regime behavior. Through my project, I hope to contribute to the efforts of the Peace Research Institute Oslo (PRIO). This research represents my Master's thesis and will culminate in a doctoral dissertation. Meanwhile, my project will create opportunities for graduate and undergraduate contributors to present and publish the findings. I also hope to explore the educational merits of my project through APSA's annual *Teaching and Learning Conference*. My objectives, with the support of NSF funding and access to TeraGrid high-speed computing, will vastly improve quantitative studies of regime behavior and conflict.

### References:

- Casper, Gretchen, and Claudiu Tufis. 2003. Correlation Versus Interchangeability: the Limited Robustness of Empirical Finding on Democracy Using Highly Correlated Data Sets. *Political Analysis* 11: 196-203.
- Geddes, Barbara. 2003. *Paradigms and Sandcastles: Theory Building and Research Design in Comparative Politics*. Ann Arbor: University of Michigan Press.
- Gleditsch, Kristian S., and Michael D. Ward. 1997. Double Take: A Reexamination of Democracy and Autocracy in Modern Polities. *Journal of Conflict Resolution*, 41(3): 361-383.
- Havard Hegre and Nicholas Sambanis. 2006. "Sensitivity Analysis of Empirical Results on Civil War Onset." *Journal of Conflict Resolution* 50(4):508-535.
- Lai, Brian, and Dan Slater. 2006. "Institutions on the Offensive: Domestic Sources of Dispute Initiation in Authoritarian Regimes, 1950-1992. *American Journal of Political Science* 50: 113-26.
- O'Brien, Sean. 2010. "Crisis Early Warning and Decision Support: Contemporary Approaches and Thoughts on Future Research." *International Studies Review*, 12 (1): 87-104.
- Peceny, Mark, and Caroline C. Beer, with Shannon Sanchez-Terry. 2002. "Dictatorial Peace? *American Political Science Review* 96:15-26.
- Schrodt, Phil. 2006. "Twenty Years of the Kansas Event Data System Project." *Political Methodologist*, 14 (1): 2-8.