

## Merging Theory and Methods for Studying International Relations

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Tentative Syllabus as of June 18, 2003

Over the last two decades, formal models and statistical methodology have become two of the most dynamic areas of international relations research. Although each has noticed the other, only rarely have theoretical models explicitly structured statistical analyses. This week aims to forge and strengthen such bonds. It covers the use of formal models to elaborate theories in international relations and how properly to test those models with statistical and other empirical methods. Participants will conduct research projects to build their skills and to illustrate the key issues. Guests include Ken Schultz (UCLA) and Paul Huth (University of Michigan).

### Sunday, June 29:

#### **Morning: The Bargaining Approach to the Study of Conflict: Simple Ultimatum Model, Rubinstein Bargaining Model, Signaling Models**

Fearon, James D. 1995. Rationalist Explanations for War. *International Organization* 49 (3):379-414.

#### Recommended:

Fearon, James D. 1997. Signaling foreign policy interests: Tying hands versus sinking costs. *Journal of Conflict Resolution* 41 (1):68-90.

Gartzke, Erik. 1999. War is in the Error Term. *International Organization* 53(3):567

Morrow, James D. 1992. Signaling Difficulties with Linkage in Crisis Bargaining. *International Studies Quarterly* 36 (2):153-172

Powell, Robert. 1996. Bargaining in the shadow of power. *Games and Economic Behavior* 15:(2):255-289.

Sartori, Anne E. 2002. The might of the pen: A reputational theory of communication in international disputes. *International Organization* 56 (1):121-149.

#### Further Reading:

Cramton, Peter C. 1992. Strategic Delay in Bargaining with Two-Sided Uncertainty. *The Review of Economic Studies* 59(1):205-225.

Hart, Oliver. 1989. Bargaining and Strikes. *Quarterly Journal of Economics* 104(1):25-43. .

Muthoo, Abhinay. 1999. *Bargaining theory with applications*. Cambridge, U.K. ; New York: Cambridge University Press.

Osborne, Martin J., and Ariel Rubinstein. 1990. *Bargaining and markets, Economic theory, econometrics, and mathematical economics*. San Diego: Academic Press.

**Afternoon: Strategic Interaction and Statistical Analysis**

Signorino, Curtis S. 1999. Strategic Interaction and the Statistical Analysis of International Conflict. *American Political Science Review* 93(2):279-297.

Signorino, Curtis S. and Kuzey Yilmaz. 2003. Strategic Misspecification in Regression Models. *American Journal of Political Science*. 47(3):551-566.

Smith, Alastair. 1999. Testing theories of strategic choice: The example of crisis escalation. *American Journal of Political Science* 43 (4):1254-1283.

Recommended:

McKelvey, Richard D. and Thomas R. Palfrey. 1996. A Statistical Theory of Equilibrium in Games. *The Japanese Economic Review*. 47(2):186-209.

McKelvey, Richard D. and Thomas R. Palfrey. 1998. Quantal Response Equilibria for Extensive Form Games. *Experimental Economics*. 1:9-41.

Morrow, James D. 1999. How could trade affect conflict? *Journal of Peace Research* 36 (4):481-489.

**Monday, June 30:**

**Morning: What Does Conflict Data Look Like? And What Should It Look Like?  
Guest Speaker: Paul Huth**

Recommended:

Bennett, D. Scott, and Allan Stam. 2001. EUGene: Expected Utility Generation and Data Management Program. Documentation available at <http://www.eugenesoftware.org/>.

Further Reading: Bennett, D. Scott, and Allan Stam. 2000. *EUGene: A Conceptual Manual*. *International Interactions* 26:179-204.

Jones, Daniel M., Stuart A. Bremer, J. David Singer. 1996. Militarized interstate disputes, 1816-1992: Rationale, coding rules, and empirical patterns. *Conflict Management and Peace Science* 15(2):163-213.

Sarkees, Meredith R. 2000. The correlates of war data on war: An update to 1997. *Conflict Management and Peace Science* 18(1):123-144.

Tir, Jaroslav, Philip Schafer, Paul F. Diehl, and Gary Goertz. 1998. Territorial, changes, 1816-1996: Procedures and data. *Conflict Management and Peace Science* 16(1):89-97.

### **Afternoon 1: War of Attrition Models as Models of Bargaining**

Fearon, James D. 1994. Domestic Political Audiences and the Escalation of International Disputes. *American Political Science Review* 88 (3):577-592.

Recommended:

Fearon, James D. 1998. Bargaining, enforcement, and international cooperation. *International Organization* 52 (2):269-306.

Kennan, John, and Robert Wilson. 1989. Strategic Bargaining Models and Interpretation of Strike Data. *Journal of Applied Econometrics* 4 (Supplement: Special Issue on Topics in Applied Econometrics):S87-S130.

Smith, Alastair. 1995. The success and use of economic sanctions. *International Interactions* 21(3):229-245.

Smith, Alastair. 1998. Fighting battles, winning wars. *Journal of Conflict Resolution* 42(3):301-320.

### **Afternoon 2: War as a Commitment Problem**

Recommended:

Kydd, Andrew, and Barbara F. Walter. 2002. Sabotaging the peace: The politics of extremist violence. *International Organization* 56 (2):263-96.

Powell, Robert. 1996. Uncertainty, shifting power, and appeasement. *American Political Science Review* 90 (4):749-764.

Wagner, R. Harrison. 1994. Peace, War, and the Balance of Power. *American Political Science Review* 88 (3):593-607.

### **Tuesday, July 1:**

#### **Morning 1: A Random Utility Approach to Discrete Choice Models**

Signorino, Curtis S. 2003. Structure and Uncertainty in Discrete Choice Models. *Political Analysis*, forthcoming.

Recommended:

McFadden, Daniel. 1974. The Measurement of Urban Travel Demand. *Journal of Public Economics*. 3:303-328

McFadden, D. 1976. Quantal Choice Analysis: A Survey. *Annals of Economic and Social Measurement*. 5:363.

**Morning 2: An Alternative Approach to Estimating Models and the Problem of Identification**  
**Guest Speaker: Ken Schultz**

Lewis, Jeffrey B., and Kenneth A. Schultz. 2003. Revealing Preferences: Empirical Estimation of a Crisis Bargaining Game with Incomplete Information. *Political Analysis*, forthcoming.

**Afternoon: Long-term Conflict**  
**Guest Speaker: Ken Schultz**

Schultz, Kenneth A. 2003. The Politics of Risking Peace: Do Doves Deliver the Olive Branch, or Does It Take a Nixon to Go to China? Manuscript, UCLA

Schultz, Kenneth A. 2003. Could Humphrey Have Gone to China? The Electoral Costs and Benefits of Making Peace. Manuscript, UCLA.

Recommended:

Gelpi, Christopher. 1997. Crime and punishment: The role of norms in crisis bargaining. *American Political Science Review* 91(2):339-360.

**Wednesday, July 2:**

**Morning 1: Selection Effects**

Reed, William. 2000. A Unified Statistical Model of Conflict Onset and Escalation. *American Journal of Political Science* 44(1):84-93.

Sartori, Anne E. 2003. An Estimator for some Binary-Outcome Selection Models without Exclusion Restrictions. *Political Analysis* 11(2):111-138.

Signorino, Curtis S. 2002. Strategy and Selection in International Relations. *International Interactions* 28(1):93-115.

Recommended:

Heckman, James J. 1976. The Common Structure of Statistical Models of Truncation, Sample Selection, and Limited Dependent Variables and a Simple Estimator of Such Models. *Annals of Economic and Social Measurement*. 5:475-492.

Heckman, James J. 1979. Sample Selection Bias as a Specification Error. *Econometrica*. 47(1):153-162.

**Morning 2: Practical Methods for Estimating Strategic Models**

Signorino, Curtis S., Robert Walker, and Muhammet Ali Bas. Picking a Fight: Disputes, Deterrence, and War-Time Alliances. Working paper.

### **Afternoon: Testing Models by Deriving Hypotheses**

Bueno de Mesquita, Bruce, James D. Morrow, and Ethan R. Zorick. 1997. Capabilities, perception, and escalation. *American Political Science Review* 91 (1):15-27. (Readers should be aware that the model in the paper is incorrect, although the principle is probably general.)

Powell, Robert. 1996. Stability and the distribution of power. *World Politics* 48 (2):239-67.

Siverson, Randolph M., and Michael P. Sullivan. 1983. The Distribution of Power and the Onset of War. *Journal of Conflict Resolution* 27 (3):473-494.

Recommended:

Kim, Woosang, and James D. Morrow. 1992. When Do Power Shifts Lead to War. *American Journal of Political Science* 36 (4):896-922.

Schultz, Kenneth A. 1999. Do democratic institutions constrain or inform? Contrasting two institutional perspectives on democracy and War. *International Organization* 53 (2):233-66.

### **Thursday, July 3:**

#### **Morning 1: A Deterrence Example Viewed Three Ways**

Huth, Paul K. Extended Deterrence and the Outbreak of War. *American Political Science Review*.

Fearon, James D. 1994. Signaling Versus the Balance of Power and Interests: An Empirical Test of a Crisis Bargaining Model. *Journal of Conflict Resolution* 38(2):236-269.

Signorino, Curtis S. and Ahmer Tarar. 2003. A Unified Theory and Test of Extended Immediate Deterrence. Working paper.

#### **Morning 2: Testing Whether One Model is “Better” than Another**

Clarke, Kevin. 2002. Testing Nonnested Models in International Relations. *American Journal of Political Science*.

Clarke, Kevin. 2003. Nonparametric Model Discrimination in International Relations. *Journal of Conflict Resolution*.

Clarke, Kevin and Curtis S. Signorino. 2003. Testing Nonnested Strategic Models. Working paper.

#### **Afternoon 1: Back to the Future: Estimating a Bargaining Model Guest Lecturer: Kris Ramsay**

Ramsay, Kristopher and Curtis S. Signorino. 2003. A Statistical Equilibrium Model of Ultimatums. Working paper.

#### **Afternoon 2: IR Week Wrap-Up**