Chapter 13

Information, Power, and War [1] [2]

William Reed
Rice University, Houston, Texas, U.S.A.

Ultimatum bargaining models of international interactions suggest that when conflict is costly and the actors are fully informed, the probability of conflict goes to zero. However, conflict occurs with some positive probability when the challenger is uncertain about the defender's reservation value. I employ a simple ultimatum game of bargaining to evaluate two traditional power-centric theories of world politics, balance of power and power transition theory. The formal and empirical analyses demonstrate that as states approach power parity, information asymmetries are greatest, thus enhancing the probability of militarized conflict. Uncertainty is a central cause of conflict emergence and is correlated with the distribution of observable capabilities. Recognizing the relationship between the distribution of power and uncertainty offers a more sophisticated interpretation of power-centric explanations of world politics.

Why is there a tendency for states with an equal distribution of observable military capabilities to engage in militarized conflict? Why might an equal balance of power cause bargaining to break down? Is the empirical relationship between power parity and conflict an artifact of the relationship between uncertainty about who is likely to win a war and equal distributions of power? These were important questions during the Cold War as the distribution of power between the United States and the Soviet Union was posited by some to maintain the peace but to promote conflict by others. These questions remain relevant today as China approaches parity with the United States, as

1. American Political Science Review, Vol. 97 (2003), pp. 633-641. Reprinted with the permission of Cambridge University Press.

2. For their feedback on this project I am grateful to seminar participants at Rice University, the University of Illinois, Texas A & M University, Binghamton University, and the Austrian Research Institute for Artificial Intelligence. In addition I received valuable suggestions from David Clark, Justin Fox, Scott Gates, Jeff Gill, Kristian Gleditsch, Jim Granato, Indridi Indridason, Mark Jones, Jiyoung Kwon, Ashley Leeds, Jim LeSage, Doug Lemke, Andrew Martin, Cliff Morgan, Karoline Mortensen, Irfan Nooruddin, Kevin Quinn, Dan Reiter, Eric Reinhardt, Mark Souva, Randy Stevenson, Ric Stoll, Suzanne Werner, Ken Williams, and Rick Wilson.

R. Trappl (ed.), Programming for Peace, 335–354.

Pakistan pursues nuclear parity with India, and as tensions on the Korean peninsula deepen.

In his seminal work on bargaining and war, Fearon (1995) specifies three conditions that may lead to war in cases such as these.[3] The conditions include uncertainty about the distribution of power, the inability to commit to a bargained outcome short of war, and the indivisibility of the stakes of war. Paramount among these conditions is that there may be disagreement between the two sides (challenger and defender) about the balance of power. Uncertainty about the balance of power can cause the challenger to demand too much from the defender. Likewise, uncertainty about the distribution of power can cause the defender to underestimate the challenger's willingness to fight. During the Cold War, foreign policy makers speculated about the willingness of the Soviet Union and the United States to fight. This condition is an issue today as analysts' opinions about the war fighting capabilities of China vary widely and there is substantial uncertainty about the maturity of North Korea's nuclear weapons program. Moreover, in the dispute over the Kashmir territory it is unclear how Pakistan's nuclear capabilities balance India's apparent overwhelming conventional military advantage.

Abstracted away from many of the everyday details of world politics, a related theoretical debate highlights the effect of balanced power versus power preponderance on the likelihood of war. With few exceptions, the scholarly consensus is that pairs of states with relatively equal amounts of observable capabilities are more likely to experience conflict (Kugler and Lemke, 1996). However, traditional explanations for this empirical pattern are unconvincing. I offer bargaining theory as a structure for examining the relationship between the distribution of power and conflict. I tie together traditional treatments of power and conflict with recent research about bargaining and conflict to provide an alternate explanation for the observed relationship between the balance of power and conflict caused by the challenger's uncertainty about the distribution of power (i.e., the expected outcome of a conflict).

In contrast to the conventional argument that the distribution of power causes conflict, I maintain that uncertainty about the distribution of power is as important a predictor of the probability of conflict as is the observed balance of power (Wittmann, 2001). I use a bargaining model to explore these questions formally and use Bayesian statistics to evaluate the empirical credibility of that bargaining model.

3. For a summary and review of bargaining theory as it has been applied to world politics see Reiter, 2003.