What Is the Enemy of My Enemy?

Causes and Consequences of Imbalanced International Relations, 1816-2001

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March 2006

Revised June 2006

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Abstract

This study explores logical and empirical implications of friendship and enmity in world politics by linking indirect international relations (e.g., "the enemy of my enemy," "the enemy of my friend") to direct relations ("my friend" "my enemy"). The realist paradigm suggests that states ally against common enemies, and thus states sharing common enemies should not fight each other. Nor are states expected to ally with enemies of their allies or with allies of their enemies. Employing social network methodology to measure direct and indirect relations, we find that international interactions over the last 185 years exhibit significant relational imbalances: *states that share the same enemies and allies are disproportionately likely to be both allies and enemies at the same time.* Our explanation of the causes and consequences of relational imbalances for international conflict/cooperation combines ideas from the realist and the liberal paradigms. "Realist" factors such as the presence of strategic rivalry, opportunism and exploitative tendencies, capability parity, and contiguity increase the likelihood of relational imbalances. On the other hand, factors consistent with the liberal paradigm (e.g., joint democracy, economic interdependence, shared IGO membership) tend to reduce relational imbalances. Finally, we find that the likelihood of conflict increases with the presence of relational imbalances. We explore the theoretical and practical implications of these issues.

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1. Introduction

Over the 1948-70 period, Syria and Jordan fought side-by-side in two interstate wars against Israel (in 1948 and 1967), each had also engaged Israel in a large number of Militarized Interstate Disputes (MIDs—Maoz, 2006a: Ch. 7). Both had also signed separate defense pacts with Egypt in 1966 and 1967 with Israel asa the target of these alliances. Syria and Jordan have also a great deal in common: they are Arab states, both have substantial Sunni Muslim, Arabic-speaking populations, and both share cultural and religious ties. In September 1970, King Hussein initiated a major confrontation with the Palestinian organizations in Jordan, in what is known as "Black September." This invoked a Syrian invasion of northern Jordan, ostensibly to help the Palestinians. Israel—the common enemy of both states—threatened to help Hussein in his fight against the invading Syrian forces (Astorino-Courtois, 1998; Maoz and Mor, 2002: 188-189).

In early 1912 Bulgaria, Serbia, and Greece formed an alliance aimed at attacking the Ottoman Empire. These allies had not only a common strategic purpose, they had also similar religious and ethnic characteristics distinct from their common enemy. On October 13, 1912 the allies launched the first Balkan war, defeating their common enemy within a few months. During the postwar London Conference, a dispute arose among the allies concerning the division of spoils. This prompted Serbia and Greece to form an alliance against Bulgaria—the big winner of the First Balkan War. The Treaty of London was signed on May 30, 1913. On June 30, Bulgaria attacked Greece and Serbia in what is known as the Second Balkan War. Romania joined the allies and so did the Ottoman Empire—the former enemy of the Greek and Serbs (Helmreich, 1966; Trotsky, 1980).

These examples illustrate the (potentially) paradoxical linkages between direct and indirect international relationships: not only do allies tend to fight each other (Bueno de Mesquita, 1981; Bremer, 1992); one of the key reasons for alliance—sharing enemies (Mearsheimer, 1994/5; Farber and Gowa, 1997)—may not be enough to override the occurrence of war between allies. These cases

cast doubt on the claim that common enemies bring rivals together (Mearsheimer, 1990; Farber and Gowa, 1994, 1997; Gowa, 1999).

Can an enemy of an enemy be my enemy as well? Can a friend of my enemy be my friend? In simple social settings, relational imbalances can and do exist. We have known for a while that no social choice scheme satisfying majority rule and democracy can insure the aggregation of transitive individual preferences into a transitive social choice (Arrow, 1951). The transitivity axiom in utility theory is violated under fairly simple conditions (Kahneman and Tversky, 1979). The analysis of intransitive international relations, however, is almost nonexistent. We do not know whether and why intransitive international relations exist. We need to understand the extent, nature, and implications of imbalanced international relations.

International enmities and long term rivalries has emerged as an important area of inquiry in international politics (Diehl and Goertz, 2000; Leng, 2000; Maoz and Mor, 2002, Bremer, 2000; Vasquez, 2004). Most studies, examine direct enmities or affinities. Yet, despite considerable discussion about "the enemy of my enemy" or the "ally of my ally," few studies have attempted to explore empirically the effect of *indirect* relations on *direct* relations between states. Accordingly, we address several issues.

1. How do indirect friendship/enmity relations affect direct relations? Specifically,
    a. Are enemies of enemies likely to be allies?
    b. Are conflicts between states sharing common enemies less likely than other types of conflict?
    c. Are friends of one's enemies or enemies of one's friends less likely to become one's allies and more likely to become one's enemies?
2. How common are imbalanced relations (e.g., enemies of my enemies that are both my allies and my enemies, allies of my enemies that are my allies, etc.)?

3. How do different paradigms of world politics explain the conditions under which imbalanced relations arise?
4. If imbalanced relations exist, how do they affect subsequent levels of conflict and cooperation between states?

We address these questions by deducing a set of hypotheses from the realist paradigm regarding the effect of indirect friendship/enmity relationships on direct relations of conflict and cooperation in dyads. We also develop an explanation of the causes and consequences of imbalanced relations, and subject these explanations to a set of empirical tests.

The analysis of the linkages between direct and indirect relations relies on a *social networks approach* and *methodology* that offers new insights to a broad range of issues in international relations (Maoz *et al.*, 2005).

2. Indirect Friendship/enmity in Theories of World Politics

The meaning of international enmity is quite clear: a state considers another state as an actual or potential enemy to the extent that it perceives the latter's intentions or actions as threatening the focal state's interests. These expectations may be based on a history of conflict, or on anticipation of future hostility. Definitions of enduring rivalries suggest that "Actors categorize other actors in their environments. Some are friends, others are enemies. Threatening enemies who are also adjudged to be competitors in some sense, as opposed to irritants or simply problems are branded as rivals" (Thompson, 2001: 561-562). Maoz and Mor (2002: 5-6) identify enduring rivalries by: (1) An outstanding set of unresolved issues; (2) strategic interdependence—mutual perceptions of security threats; (3) psychological manifestation of enmity—suspicion, demonization, and hatred; and (4) repeated militarized conflict (cf. Diehl and Goertz, 2000). Hence, international enmity refers to the *perception or anticipation of hostility based on a history of past militarized conflict between states.*

International friendship is a trickier concept. Whereas enmity is defined in much the same way by different theoretical paradigms, they may differ considerably in their conception of international friendship (e.g., Maoz *et al*., 2006). We elaborate on this matter below.

2.1. *Friendship/Enmity Relations in the Realist Paradigm*

Realists argue that states are motivated by a survival instinct. But since no state can insure its survival through reliance on its power alone, one must seek allies to deal with security threats. Yet states are suspicious of each other for fear of being exploited. "The international system is…a brutal arena where states look for opportunities to take advantage of each other, and … have little reason to trust each other" (Mearsheimer, 1994/5: 9).

This creates a paradox: states must form alliances, yet they are wary of being exploited by their would-be allies. Realists resolve this paradox by arguing that states ally on the basis of congruence of strategic interests (Walt, 1988; Farber and Gowa, 1997, 1995; Gowa, 1999). And what better interest is there than having common enemies? "Balance-of-power logic causes states to form alliances and cooperate against common enemies" (Mearsheimer, 1994/5: 13). Thus states that share enemies are likely to become allies.

Other indirect friendship/enmity relationships follow. Enemies of allies are considered enemies because—even if such actors have not been directly hostile to the focal state—its allies may draw it into an—intended or unintended—conflict.[1] Likewise, states view allies of enemies as potential enemies, because they perceive themselves as potential targets of alliances forged by their enemies, thus they act to counter-balance potentially hostile alliance or initiate preventive conflict against them (Maoz, 2000; 2002; Walt, 1988).

Two system-level implications follow. First, such logic drives the international system towards bipolarity (Lave and March, 1974: 67; Lee, Zinnes, and Muncaster, 1994). Second, the risk of global conflict in such a system is very high (Saperstein, 2004: 291-293).[2]

Thus, the realist story about the effect of indirect friendship/enmity relations on direct relations is straightforward. States that share common enemies share common threats, and thus have common strategic interests. These are often manifested in contractual alliance treaties that define specific coordinated actions under different contingencies. The fear of cheating and exploitation prevents the formation of alliances that are likely to be broken. Thus states do not ally with those that are likely to constitute future enemies, nor are they likely to fight those who can offer potential security against more serious enemies. Thus indirect friendship/enmity relations impose consistent direct friendship/enmity relations.

Thus, the hypotheses of the realist paradigm concerning the effect of indirect relations on direct ones are.

RH1. Enemies of enemies are likely to align with each other.

RH2. Enemies of enemies are unlikely to fight each other.

RH3. Friends of enemies are unlikely to become allies, nor are enemies of friends likely to align with each other.

RH4. Indirect enemies (i.e. friends of enemies and enemies of friends) are more likely to fight each other than states that are not indirect enemies.[3]

RH5. Relations between states tend towards balance. Imbalanced relations (e.g., enemies of enemies that are one's enemies, allies of enemies that are one's allies) are quite rare.

2.2. *Realist Explanations of Imbalanced Relations*

Abstract discussions of the "enemy of my enemy" phenomenon pervade the literature; yet few empirical studies examined whether states opt for balanced relations. Healy and Stein (1973) examined data on diplomatic interactions over the 1871-1880 period and show that the Germany-Austria-Russia (G-A-R) triad fluctuated between balanced and imbalanced relations but converged towards balance in the late 1870s. They also find that imbalanced relations are more likely to move

towards balance than are balanced relations to move towards imbalance. McDonald and Rosecrance (1985) find that a high proportion of imbalanced relations that remain stable over time and quite a few balanced relations that become imbalanced, concluding that the European system of the 1880s moved towards increased imbalance. While highly innovative, these studies do not offer specific hypotheses as to the sources and consequences of balanced or imbalanced relationships. Yet they suggest that considerable imbalances did exist in an era in which a balancing logic was thought to dominate the relations among major powers.

By definition, imbalanced relations entail inconsistencies between pairs of hypotheses derived from the realist model. According to RH5, such imbalances should be quite rare. But if imbalanced relations do exist, how does the realist paradigm account for them? The ultimate realist explanation for imbalanced relations is suggested by Lord Palmerston's statement that, "[w]e have not eternal allies and we have not perpetual enemies. Our interests are eternal and perpetual and those interests it is out duty to follow." while this statement reflects the expediency of major powers' alignments in the nineteenth century, the problem with this logic is that an interest can be found to explain any inconsistency in the relations between friends or foes. However, a more sophisticated realist perspective offers some plausible stories to account for possible imbalances.

Imbalanced relations are caused by dense and multifaceted interactions. States that are politically relevant to each other (Maoz, 1996), are interdependent with respect to their security. Realists argue that the opportunistic and exploitative nature of strategic interaction that results from decision makers' reliance on a realpolitik world view is prone to induce imbalanced relations. "Realist" policy makers are suspicious of their allies and opportunistic with regard to enemies (joining them for the purpose of short-term gains). They also work under the assumption that they might be exploited by their allies and/or courted by enemies, and thus react accordingly. The following factors provide explanations of imbalanced relations that are consistent with a realist framework.

1. *The Opportunism hypothesis* (RH6). Alliances are ad hoc arrangements serving transient interests (such as defending against or attacking a common enemy). When an ally of the focal state gets into trouble with a third party—typically one not covered by the alliance treaty—the focal state might exploit the ally's vulnerability and attack it. This may capture Palmerston's logic to some extent. Thus, the likelihood of conflict between two allies increases when one of them is involved in a conflict with third parties.

2. *The Strategic Rivalry Hypothesis* (RH7). The enmity between strategic rivals is profound and long-term; yet such states may have an ad hoc interest to ally in face of a common threat (or opportunity). Once this threat is removed, or the opportunity is seized, the fundamental suspicion and hostility underlying the rivalry re-emerges. Thus, strategic rivals are more likely to display imbalanced relations than are other dyads.

3. *The Distance Hypothesis* (RH8). Just as the frequency of violence is disproportionately high between people who are close to each other (domestic violence, child abuse, family honor disputes), contiguous states are likely to fight each other even if they are occasional friends. Contiguity makes for frequent territorial disputes that supersede more ad hoc interests such as those invoked by the presence of common enemies and resulting short-term alliances (Huth and Alee, 2002: 30-32; Vasquez, 2004, 2001).

5. *The Status/Reputation Hypothesis* (RH9). The interaction of major powers with other states is more dense and varied than interaction between minor powers. Moreover, major powers are particularly concerned about balancing of power. Consequently their behavior frequently shifts from diplomacy to conflict and vice versa, thus generating behavioral imbalances (Healy and Stein, 1973; McDonald and Rosecrance, 1985). This implies that major powers may exhibit a higher frequency of imbalanced relations than minor states.

2.3. *The Liberal Challenge*

Neoliberal scholars do not contest the fundamental realist logic and the deductions regarding the effect of indirect friendship/enmity relations on direct ones. Liberals also concur with the realist definition of enmity, yet they have a broader conception of friendship in international relations than do realists. Liberal notions of friendship encompass factors that reflect shared affinities and values—joint democracy, trade, and membership in International Governmental Organizations (IGOs) (Russett and Oneal, 2001; Keohane and Martin, 1995). These factors supplement the realist factors that are said to shape dyadic cooperation.

Liberal affinities tend to create stable perceptions and prevent opportunism and exploitation (Russett and Oneal, 2001: 193-96). Thus states that are economically and politically interdependent (and thus friendly) are reluctant to take advantage of each other. Conversely, the absence of liberal interdependence leads states to resort to realpolitik suspicions and opportunism. Thus, imbalanced relationships occur when strategic affinities are not supplemented by "liberal" ties. In such cases, the economic, political, and institutional constraints on double-crossing are removed, and states may seize opportunities to join former enemies or betray common friends, even when they should not. It follows that,

LH1. Joint democracy, trade, and joint IGO membership reduce the likelihood of imbalanced relations. We are more likely to observe imbalanced relations in dyads that are not jointly democratic, dyads that account for low levels of trade, and dyads that do not share a large number of IGO memberships.

The consequences of imbalanced relations are also significant. Imbalanced relations increase the risk of conflict and reduce the prospects of cooperation even when there is no "objective" reason to fight (e.g., territorial dispute). This is so because such relations are characterized by uncertainty and mistrust. When a state can clearly designate another as a threat, it is possible to prevent conflict through mutual deterrence. However, when relations are imbalanced, neither member

of the dyad knows whether or not it can trust the other; hence, the temptation to launch preventive conflict in such cases is especially. Thus, the liberal explanation suggests that

LH2. Imbalanced relations have a positive effect on the probability of dyadic conflict and a negative impact on the probability of dyadic cooperation.

Before going into the research design and empirical analysis, we need to explain how we model indirect friendship/enmity relations and how we define balance and imbalance in these relationships.

4. Modeling Indirect Relations

Social networks analysis offers a systematic methodology for exploring indirect relations of various degrees (second-order—the enemy of my enemy; third order—the enemy of the enemy of my enemy—and so forth) (Maoz *et al.*, 2005). This approach also entails measures of structural balance and transitivity in a system of relations (Wasserman and Faust, 1997: 220-233). We demonstrate some of these ideas below.

A network is a set of units (in our case, states) and a principle or rule that defines which unit is tied to (or has a relationship with) another unit. For example, the rule "is the enemy of" defines enmity-based ties in a system. The rule "is the friend/ally of" defines the presence/absence of alliance ties between any two states, and the network as a whole defines the alliance structure in the system. The rule that defines a network may be binary or it may specify a magnitude such as "the magnitude of conflict sent by state *i* to state *j*." Networks are represented by graphs in which some of the nodes (states) are connected by directional or bidirectional arrows that signify ties and signs or numbers that signify the type and/or magnitude of relations between nodes. We show the graphic interpretation of balanced and imbalanced relations in a network in Figure 1 below.

A balanced relationship in a triad is one wherein we can infer the relationship in a dyad given information about the relationship about the two other dyads. We illustrate this in Figure 1.

Figure 1 about here

Figure 1.1 is an example of balanced relation. States *i* and *j* are friends as are *i* and *k*. Consequently, *j* and *k* should be friends, and that is what we have. Figure 1.2 is the enemy of my enemy version of a balanced relationship. Figures 1.3 and 1.4 represent imbalanced versions of Figures 1.1 and 1.2, respectively. In Figure 1.3 the relationship between *i* and *j* is positive and so is the relationship between *j* and *k*. However, the relationship between *i* and *k* is negative, meaning that the friend of my friend is my enemy. In Figure 1.4, the enemy of my enemy is my enemy. In both cases, information about the relationships between members of any two dyads leads to erroneous inference concerning the remaining dyad.[4] An alternative representation of networks is via matrices. This is what we use here to model indirect relations.

Define an *enmity network* E_t as an $n \times n$ matrix where rows and columns represent the n states in the system at time t. The entries of this matrix e_{ij} are -1 if states i and j had a Militarized Interstate Dispute (MID) in year t and zero otherwise. Note that matrix E_t is symmetric $(e_{ij} = e_{ji} \ \forall i, j \in E_t)$ and all diagonal cells are zero. To identify enemies of enemies we raise matrix E_t to the second power such that $EE_t = E_t \times E_t = E_t^2$. All entries in Matrix EE_t are non-negative. Note that while E_t is binary, EE_t is not. This is so because any two states can have more than one joint enemy.[5] For example, Turkey's Alexandreta dispute with Syria in 1955-56 makes it an enemy of Israel's enemy. While Israel's Kinneret Raid (1955) on Syria makes it the enemy of Turkey's enemy.

Likewise, we can identify enemies of friends and friend of enemies. Define Matrix A_t as an $n \times n$ matrix whose entries a_{ij} are 1 if states i and j have a formal alliance in year t and zero otherwise. Thus friends of enemies are defined by matrix $FE_t = E_tA_t$. Likewise, Enemies of friends are given by matrix $EF_t = AE_t$.[6] For example, the alliance between England and France made Germany the en-

emy of England's friend during the 1911 Agadir crisis and it made England the Friend of Germany's enemy (France) during the same crisis.

A hypothetical matrix representation of these relationships is given in Table 1 below.

Table 1 about here

Table 1.e. shows a network of dyadic enmities (marked by -1) and Table 1.a. shows a network of dyadic alliances. The lower parts of the table show the derived indirect relations (1.ee. is the "enemy of my enemy," 1.aa. is the "ally of my ally," etc.). The reader can ascertain from the text above how we derived the matrices of indirect relations.[7] We now turn to a discussion of the research design.

5. **Research Design**

a. *Data*

Enmity data is derived from the dyadic MID dataset (Maoz, 2005). For each year we form an $n \times n$ matrix E_t (where n is the number of states that exist as independent system members for that year). Entries, e_{ij}, are zero if states i and j were not involved in an MID during that year and -1 if they were. Friendship is measured by the COW formal alliances dataset, covering the 1816-2000 period.[8] A binary alliance matrix A_t has entries, a_{ij}, of zero if states i and j were not allied and one if they were.[9]

The strategic rivalry data is derived from Thompson (2001; Colaresi and Thompson, 2002). This dataset is preferable to other enduring rivalry data (e.g., Diehl and Goertz, 2000; Maoz and Mor, 2002) because it is based on perceptual definitions of rivalries—independent of the actual occurrence of disputes and wars between states. In addition we use the COW contiguity dataset and the distance (Gleditsch and Ward, 2001) dataset,[10] the Barbieri, Keshk and Pollins trade dataset,[11] the Polity IV dataset,[12] and the IGO dataset[13] for the liberal affinity variables discussed in LH1.

The spatial domain exists of all independent state members of the international system for a given year. The temporal domain covers the years 1816-2001. The unit of analysis is the dyad year. We employ the entire population of dyads for estimation of alliance ties, as well as for estimating imbalance relations. However, estimating dyadic conflict is more sensible and meaningful on a population of politically relevant dyads (Maoz, 1996).

b. Measurement of Variables

Dependent Variables.

Alliance. A dyad is allied whenever the two states had an alliance of any type (defense pact, nonaggression pact, or entente), and zero otherwise.

Conflict. Two variables are used. The MID variable is coded as one whenever two states were engaged in an (ongoing) Militarized Interstate Dispute and zero otherwise. *WAR* was coded as one whenever two states were engaged in an interstate war and zero otherwise.

Imbalanced Relations. We used two sets of measures of imbalance relations. The first set disaggregated different types of imbalanced relations into a set of binary variables:

a. Indirect-Direct Imbalances. This variable reflects contradictions between expectations derived from information about indirect relations and the actual form of direct dyadic relations. It receives a score of 1 if (1) the enemy of one's enemy was one's enemy (EE-E), (2) the ally of one's enemy was one's ally (AE-A) or (3) if the enemy of one's ally was one's ally (EA-A), and zero otherwise.
b. Direct/Compound imbalance. This is a more severe form of imbalance because it reflects a contradiction between direct relationships, rather than a derived contradiction between indirect (e.g., enemy of my enemy) and direct (enemy) relations. This variable receives a score of one if (1) a state is both an ally and an enemy during the same year (E-A), or (2) two states share the same

enemies (EE=1), have a direct alliance (A=1), and engage in an MID/War during a given year (E=1), and zero otherwise.

The second variable aggregates these distinct variables in terms of the severity of imbalance, into an ordinal imbalance (ORDIMBAL) variable as follows

$$ORDIMBAL = \begin{cases} 0 & if\ IMBAL = 0 \\ 1 & if\ EEE = 1, or\ EFA = 1, or\ FEA = 1 \\ 2 & if\ AE = 1 \\ 3 & if\ EE = 1 and\ A = 1 and\ E = 1 \end{cases}$$

Where IMBAL=0 means that all of the above variables assume a score of zero.

Independent Variables.

Enemy of my enemy. For each year we generate an enmity sociomatrix with entries e_{ij}=-1 if states *i* and *j* had a MID during that year, and zero otherwise. The enemy of my enemy is given in matrix $EE_t = E_t^2$. Each entry $0 \le ee_{ij} \le n-2$ denotes the number of joint enemies of states *i* and *j*. Diagonal entries, ee_{ii} denote the number of enemies of each state.

Friend of my enemy. Given matrices E_t and A_t, the friend of my enemy is defined as $FE_t = E_tA_t$. The product matrix has entries fe_{ij} of either zero or negative numbers denoting the number of friends of enemies states *i* and *j* have in common. Note that FE_t is not symmetrical because it is a product of two different matrices. The diagonal entries of matrix FE_t denote for each state the number of friends of its enemies. This has some interesting implications which we leave for further studies.

Enemy of my friend. This matrix is defined as $EF_t = A_tE_t$. The resulting matrix is also composed of non-positive integers and is asymmetrical. Matrix EF_t is the transpose of FE_t $(EF_t = FE_t^{'})$. Diagonal elements denote the number of enemies of friends for a given state.

Thus, for each of the years over the 1816-2000 period we are able to identify if a given dyad qualified as an Enemy of an Enemy (EE), an Enemy of a Friend (EF), or a Friend of an Enemy

(FE). Each of these variables is assigned a zero (if the answer to the specific question is negative) or one (if the answer to the specific question is positive).

We now turn to the variables used in the explanation of relational imbalances.

Third Party Conflict. From the dyadic MID dataset we compute the total number of disputes in which a given state was involved at a given year. We subtract the number of dyadic MIDs for dyad *ij* from the monadic disputes of *i* and *j*. These are denoted as MID_{ik} and MID_{jk}, respectively. We then code a binary variable TPDMID as:

$$TPDMID = \begin{cases} 0 & if\ MID_{ik} = 0 \quad \& MID_{jk} = 0 \\ 1 & if\ MID_{ik} > 0 \quad or\ MID_{jk} > 0 \quad \forall k \neq i, j \\ 2 & if\ MID_{ik} > 0 \quad \& \ MID_{jk} > 0 \end{cases}$$

Strategic Rivalry. This variable is coded as one if two states show up as strategic rivals in the Thompson (2001) list, and zero otherwise.

Distance is the distance between the capitals of the respective states. This variable allows us to control for distance-related effects on direct and indirect relations and thereby test the *distance* hypothesis *(RH8)*. We also use a dichotomous contiguity score as typically employed in most dyadic analyses of international conflict (e.g., Russett and Oneal, 2001). For the *status* hypothesis we use the traditional COW definition of major powers.

Minimum democracy. We compute regime scores for each state making up the dyad, using the Maoz-Russet (1993) regime index. This index ranges from -100 to +100. We use the weak link measure, that is, the minimum regime score of the members of the dyad.

Joint Trade. We use the Russett and Oneal (2001: 140-141) definition of joint trade as DEPENDENCY$_{ij}$ = TRADE$_{ij}$/GDP$_i$.

Joint IGO Membership. We modify the Russett-Oneal measure (2001: 169-170) by dividing the number of IGOs shared by states *i* and *j* by the total number of IGO memberships of *i* and *j*, respectively

and averaging across the states. Thus $JOINIGO_{ij} = \frac{1}{2}\sum_{i,j \in k} \frac{IGO}{IGO_k}$. This insures that a dyad that has a small number of joint IGO compared to the number of IGO memberships of each member does not get an inflated joint membership score compared to a dyad that shares many IGO memberships relative to the IGO memberships of each member.

Control Variables

Capability Ratios. We use the traditional measure $CAPRAT = CINC_H / CINC_L$ where *CINC* is the Composite Index of National Capabilities (Singer, 1987) and the *H* and *L* subscripts stand for the state with the highest or lowest capabilities, respectively.

Cumulative number of past disputes for each dyad. Realists predict that states that had many disputes in the past are unlikely to form alliances. This is the notion of "my enemy is not likely to be my ally." On the other hand, given the fact that a few dyads account for a majority of all dyadic conflicts (Maoz, 2004), dyads who experienced many conflicts in the past are more likely to engage in yet another MID or war at present.

Statistical Estimation

All independent and control variables are lagged one year prior to the year of observation on the dependent variable. We start with simple bivariate analyses that follow from hypotheses. Note that the bivariate hypotheses specify necessary—but not sufficient—conditions for alliances and conflict between indirect enemies/friends, thus RH1 expects that states sharing common enemies should be allies but those that do not share common enemies may or may not be allies. However RH2 suggests that states that share enemies are not expected to be enemies. A more accurate assessment of this particular set of expected relationships—beyond the traditional Yules' Q measure of association for two-by-two tables (good for necessary condition testing, Hildebrand *et al.*, 1977)—is given by the m_b measure (Maoz, 1996: 130-132). This is a Proportionate Reduction in Error (PRE)

coefficient that varies between -1 and +1 and measures the proportion of the Chi-Square statistic that is due to variation that is consistent (positive m_b) or inconsistent (negative m_b) with a given hypothesis. Briefly, m_b is calculated as:

$$m_b = \frac{\sum_{m=1}^{k} \frac{(o_{cm} - e_{cm})^2}{e_{cm}} - \sum_{j=1}^{l} \frac{(o_{ij} - e_{ij})^2}{e_{ij}}}{\chi^2}$$

Where o_{cm} and e_{cm} are, respectively, the observed and expected frequencies in "consistent" cells and o_{ij} and e_{ij} are, respectively, the observed and expected frequencies in "inconsistent" cells, and χ^2 is the Chi-Square score. Here we examine only the effect of the cases in the bottom right cell in the table to which the various hypotheses about balance refer. Since the realist model expects that enemies of enemies would be allies, this cell is designated as consistent if the observed frequency exceeds the expected one. Likewise, if we expect enemies of enemies not to fight each other, then the bottom-right cell is designated as consistent if the observed frequency is *lower than* the expected frequency, and it is designated as inconsistent otherwise. The m_b score is the proportion of the Chi-Square score accounted for by the consistent/inconsistent frequency of this particular cell.

We start the multivariate analyses with a baseline model that examines the effect of friendship/enmity relations on the dependent variables, to test the realist hypotheses (RH1-RH5). If these analyses reveal significant imbalances (e.g., enemies of enemies are both allies and enemies; friends of enemies, are both enemies and allies), we move to the next stage of the explanation: testing the effect of the variables specified in RH6-9 and LH1 on the presence or absence of imbalanced relations. Here the dependent variables are the two sets of imbalance variables and these are regressed on the realist and liberal factors entailed in the integrative explanation of relational imbalances.

We then move to the third stage of the analysis; examining how relational imbalances affect conflict and cooperation by regressing on the alliance initiation variable the entire set of independent

variables including the lagged imbalance variables, and doing the same with the MID/Wars as the dependent variable.

We test these equations via logit analysis, modified by the use of splines and years of peace (Beck, Katz, and Tucker, 1998). We also use the King and Zeng (2001) procedure for correcting for rare-event biases in the population (given that the probability of an alliance is 6.24% and of a MID it is 0.05%). We use the prior correction method on the dependent variables, applying the actual proportions of 1's of alliances and MIDs in the population.

6. Results

We start by examining the bivariate effects of indirect friendship/enmity on direct friendship/enmity. Table 2 provides the results of this analysis:

Table 2 about here

The results of table 2.1 support RH1. Enemies of enemies are three times more likely to become allies than is to be expected by chance alone. Over 90% in the Chi-Square statistic are accounted for by the effect of indirect enmity on direct friendship. However, it turns out that states sharing common enemies confront each other in both MIDs and all-out wars much more often than is to be expected by chance alone. This accounts for roughly 90% of the variance in the Chi-Square score.[14] This is a fairly strong refutation of RH2 that expects these states not to fight each other. These results are corroborated by the test of the effect of indirect enmity (friend of my enemy and enemy of my friend) on direct friendship/enmity relations in Table 3. (In the interest of space, table 3 presents the lower row of the relevant cross tabulations that is of interest to us and the summary statistics.)

Table 3 about here

The results provide strong support for RH4. The allies of a state's enemies and the enemies of a state's allies are tend to become direct enemies of a state. At the same time—and in sharp contradiction to RH3 and RH5—enemies of friends and friends of enemies (who by realist expectations should be direct enemies but not direct friends) are four times more times more likely to become allies than is to be expected by chance alone.

Some of these findings are not new: we know that allies are more likely to fight each other than expected by chance alone (Bueno de Mesquita, 1981; Bremer, 1992). But we also know that this effect disappears once placed in a more complex multivariate equation (Bremer, 1992; 2000). What our findings reveal, however, is that the same factors that lead states to form alliances correlate with their tendency to fight each other. In fact, states that share both enemies and alliances are ten times more likely to fight each other than is expected by chance alone. So it is not only that allies fight one each other. Rather, our analysis reveals an astonishing fact: *allies that share common enemies share both common interests and common enmities*. This is, to the best of our knowledge, the first time that an empirical analysis of international relations reveals this type of strategic imbalance. We move now to a multivariate analysis of these issues.

Table 4 about here

Table 4 provides the baseline model for the analysis of the effects of indirect relations on direct ones. Clearly, the results of the baseline model form an even deeper sense of imbalanced behavior than the one provided by the bivariate analyses. States that share common enemies are likely to ally with each other—in accordance with RH1. However, enemies of allies and allies of enemies have a *positive* effect on the probability of alliance (contrary to RH3). Moreover, the number of past disputes in a dyad has a positive effect on the probability of alliance. Surprisingly—and contrary to realist expectations—it turns out that both indirect enmity and direct enmity actually *increase*

the probability of alliance. This finding presents a perverse image of extreme opportunism in terms of the factors that cause states to ally with each other. We come back to this matter below.

When two states are friends of enemies or enemies of friends they are significantly likely to fight each other, again in accordance with RH4. Yet, enemies of enemies that are expected not to fight each other (RH1) tend to engage in direct conflict. The presence of a direct alliance has—as expected—a negative impact on the probability of MIDs and wars. It does not, however, remove the imbalance as the realist paradigm would have us believe.

The significant effects of imbalanced relations on dyadic conflict and cooperation require us therefore to examine the sources of these imbalances, in line with the integrative explanations presented in the theory of balance and imbalance. We do that in Table 5.

Table 5 about here

The results here support our explanation of the sources of imbalanced relations. Realist variables (both those specified in hypotheses RH6-RH9 and those entailed in the control variables) significantly increase the probability imbalances. States tend to resort to quick—and even simultaneous—switches of friends and enemies when they see an opportunity (say, when their partner gets entangled in disputes with third parties) to exploit them. They tend to make these switches with states that they regard as strategic allies and with contiguous rather than with distant states. Major powers are more likely than minor powers to engage in rapid friendship/enmity switches. Finally, large capability disparities are likely to entail direct and compound imbalances, but not indirect ones. This adds credence to the realist argument that states that have frequent and multifaceted interactions are far more likely to exhibit imbalanced relations, than states that do not interact often with each other.

Liberal variables—with the exception of the standardized IGO similarity score—tend to reduce the probability of imbalanced relations. States that do not share democratic affinities or are not economically interdependent tend to resort to exploitative tactics of switching friends and enemies. We turn now to an analysis of the implications of imbalanced relations for conflict and cooperation. This is done in Table 6.

Table 6 about here

The results in this table support IH1. Relational imbalances reduce the probability of subsequent cooperation and increase the probability of conflict. Separate tests for the effects of direct and indirect imbalances and of simple and compound imbalances on conflict and cooperation resulted in virtually identical results. These results suggest that fluctuations in friendship/enmity relations tend to have a destabilizing effect on subsequent relations. States that have experienced imbalanced relations in the past tend to be conflictual in the future.

These findings imply that we should not dismiss the significant occurrence of imbalanced relations as a typical feature of fluid international relations—as suggested by Lord Palmerston's adage. Imbalanced relations have important implications for the subsequent relations between states. To the extent that imbalanced relations reduce cooperation and increased conflict, states may open a cycle of imbalanced relations that erodes stability beyond that which their decision makers have consciously and deliberately intended. Enduring rivalries may in fact be deepened and made more severe merely by rapid fluctuations between hostility and friendship that makes decision makers' expectations of their rival unstable. Maoz and Mor (2002) found that stable perceptions and stable expectations of rivals are an important precondition for rivalry termination. The current findings suggest that the implications of imbalanced relations may prolong the duration of such rivalries.

7. **Conclusion**

A simple—perhaps simplistic—version of the realist paradigm suggests that shared enmity towards third parties generates a common interest that lead to alliances between states. Likewise, indirect enmity (the ally of my enemy and the enemy of my ally) creates an aversion to alliance formation. Finally realism expects international relations to be generally balanced. States that share common enemies and become allies should not fight each other, and states that are indirect enemies should not become directly allied with each other.

We find support for some of the predictions of the "simple" realist version: states that share common enemies tend to ally with each other; states that are indirect enemies tend to fight each other. At the same time, our analyses reveal significant imbalances that are inconsistent with the expectation of balance between indirect and direct relations. Enemies of enemies can be both friends and enemies at the same time. Friends of enemies and enemies of friends can be both friends and enemies at the same time. This is a significant novel finding. We knew that allies may fight one another more than is to be expected by chance alone. Yet our findings suggest *that the same factors that increase the likelihood of alliance may simultaneously increase the likelihood of conflict*. This is, we believe, a highly counterintuitive result.

Why do such imbalances occur? What do they imply for subsequent relations between states? An integrated perspective that combines both realist and liberal approaches argues that liberal affinities—joint democracy, economic and institutional interdependence—induce consistent relations. In contrast, relations that are based on realpolitik logic and are not modified by liberal affinities tend to generate significant imbalances. We also argued that such imbalances may have long lasting effects on dyadic relations—they increase the prospects of conflict and reduce the prospect of security cooperation between states. Our empirical analyses largely supported this argument.

What do these findings imply for theories of international politics? This analysis suggests three major insights. First, Lord Palmerston's clever remark about the lack of permanent friends or

enemies in world politics provided only a partial explanation of this phenomenon. It is true that quite a few states indeed fluctuate rapidly between friendship and hostility in a rather uninhibited manner. However, not all states do and they do not do this all the time. Those who shy away from the practice of exchanging friends and enemies are bound by economic, normative, and institutional ties. Another problem with Palmerston's argument is that states' interests are not necessarily served by such fluctuations. In fact, if we assume that states' security increases with cooperative relations and declines with conflictual ones, then just the opposite is true.

Second, a small subset of strategically active dyads accounts for most of these imbalances. These tend to consist of major powers, of roughly equal capability, at least one of the members of which is nondemocratic.[15] In accordance with our explanation of imbalances, the states comprising these dyads exhibit generally "dense" interactions—they engage frequently in both cooperative and conflictual actions, not only with each other, but with third parties as well. And it is this density of interaction—as given by the explanatory variables suggested by RH6-9 and LH1—that accounts both for imbalanced relations and for the resulting behavioral manifestations of such imbalances.

Third, this study demonstrated some of the power and potential contribution of social networks analysis for the understanding of international problems. We have seen that it is possible to model—in quite novel and unexpected ways—linkages between indirect relations and direct ones. This is only a first step in a larger project, but it shows how this approach can highlight interesting and counterintuitive features of international relations, both by shedding new light on old problems and by uncovering and analyzing new ones.

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Table 1: Direct and Indirect Relationships—Enemies and Friends

1.e. Enemies (E_t)

	A	B	C	D	E	F
A	0	-1	0	-1	0	0
B	-1	0	-1	0	-1	0
C	0	-1	0	0	0	-1
D	-1	0	0	0	0	0
E	0	-1	0	0	0	-1
F	0	0	-1	0	-1	0

1.a. Allies (A_t)

	A	B	C	D	E	F
A	0	0	1	0	0	1
B	0	0	0	1	0	0
C	1	0	0	1	0	0
D	0	1	1	0	0	0
E	0	0	0	0	0	0
F	1	0	0	0	0	0

1.ee. Enemies of Enemies (EE_t)

	A	B	C	D	E	F
A	2	0	1	0	1	0
B	0	3	0	1	0	2
C	1	0	2	0	2	0
D	0	1	0	1	0	0
E	1	0	2	0	2	0
F	0	2	0	0	0	2

1.aa. Allies of Allies (AA_t)

	A	B	C	D	E	F
A	2	0	0	1	0	0
B	0	1	1	0	0	0
C	0	1	2	0	0	1
D	1	0	0	2	0	0
E	0	0	0	0	0	0
F	0	0	1	0	0	1

1.ea. Enemies of Friends (EA_t)

	A	B	C	D	E	F
A	0	-1	-1	-1	0	0
B	-1	0	-1	-1	0	-1
C	-1	0	0	-1	0	0
D	0	0	-1	0	0	-1
E	-1	0	0	-1	0	0
F	-1	0	0	-1	0	0

1.ae. Allies of Enemies (AE_t)

	A	B	C	D	E	F
A	0	-1	-1	0	-1	-1
B	-1	0	0	0	0	0
C	-1	-1	0	-1	0	0
D	-1	-1	-1	0	-1	-1
E	0	0	0	0	0	0
F	0	-1	0	-1	0	0

Table 2: The Effects of Indirect Relations on Direct Relations

Table 2.1: Is the Enemy of my Enemy my Friend?

		Alliance (*t*)?		Total Row
		No	**Yes**	
Enemy of My Enemy (*t-1*)?	**No**	609,354 (607,775.5)*	40,847 (42,425.5)	650,201
	Yes	9,029 (10,607.5)	2,319 (740.5)	11,348
	Total Column	618,323	43,166	661,549
	Statistics	χ^2 = 3,700; p < .0000; Yule's Q = 0.586; m_b = 0.909		

Table 2.2: Is the Enemy of My Enemy Also My Enemy? (Politically Relevant Dyads Only)

		MID(*t*)?		Total Row
		No	**Yes**	
Enemy of My Enemy(*t-1*)?	**No**	73,248 (72,865.8)*	2,897 (3,279.2)	76,145
	Yes	4,923 (5,305.2)	**621 (238.8)**	5,544
	Total Column	78,171	3,518	81,689
	Statistics	χ^2 = 686.06; p < .0000; Yule's Q = 0.523; $\boldsymbol{m_b}$ **= -0.892**		
		War(*t*)?		**Total Row**
		No	**Yes**	
Enemy of My Enemy(*t-1*)?	**No**	75,725 (76,600.6)*	420 (544.4)	76,145
	Yes	5,380 (5,504.4)	**164 (39.6)**	5,544
	Total Column	81,105	584	81,689
	Statistics	χ^2 = 421.66; p < .0000; Yule's Q = 0.692; $\boldsymbol{m_b}$ **= -0.927**		

Note: * Expected Frequencies

Shaded cells contain observed and expected frequencies reflecting the test hypothesis. **Inconsistent** cells are boldfaced. ***Boldfaced*** $\boldsymbol{m_b}$ statistics (with negative values, indicate imbalanced relations).

Table 3: Is the Enemy of My Friend or the Friend of My Enemy Also My Enemy?

Type of Indirect Relationship		Enemies of Friends: Allies or Enemies?		
		MID(*t*)?		Total Row
		No	Yes	
Enemy of My Friend(*t-1*)?	Yes	25,596 (27,943.3)	2,526 (178.7)	28,122
	Statistics	χ^2 = 3.2e+04;** p < .0001; Yule's Q = 0.948; m_b = 0.963		
		War(*t*)?		Total Row
		No	Yes	
	Yes	27,534 (28,089.8)	588 (32.2)	28,122
	Statistics	χ^2 = 1.0e+04; p < .0001; Yule's Q = 0.975; m_b = 0.959		
		Ally(*t*)?		Total Row
		No	Yes	
	Yes	20,419 (26,287.4)	**7,703** **(1,834.6)**	28,122
	Statistics	χ^2 = 1.9e04; p < .0001; Yule's **Q = 0.728; m_b = -0.894**		
Friend of My Enemy*(t-1)*?		Friends of Enemies: Enemies or Allies?		
		MID(*t*)?		N
		No	Yes	
	Yes	19,917 (22,258.6)	2,484 (142.4)	22,401
	Statistics	χ^2 = 4.0e+04; p < .0001; Yule's Q = 0.958; m_b = 0.926		
		War*(t)*?		N
		No	Yes	
	Yes	21,814 (22,375.4)	587 (25.6)	22,401
	Statistics	χ^2 = 1.3e+04; p < .0001; Yule's Q = 0.980; m_b = 0.947		
		Ally(*t*)?		N
		No	Yes	
	Yes	15,825 (20,939.6)	**6,576** **(1,461.4)**	22,401
	Statistics	χ^2 = 2.0e+04; p < .0001; Yule's Q = 0.745; **m_b = -0.895**		

Note: * Expected Frequencies

Shaded cells contain observed and expected frequencies reflecting the test hypothesis. **Inconsistent** cells are boldface letter.

Table 4: The Effect of Indirect Friendship/Enmity Relations on Direct Relations—Accounting for Imbalances: Logit Analysis, All (Politically Relevant) Dyads, 1816-2001

Independent Variable	Baseline Model		
	Alliances	**MIDs[+]**	**War**
Enemy of My Enemy	0.269** (0.052)	**0.248** (0.061)**	**0.485** (0.111)**
Enemy of My Friend	**1.451** (0.023)**	0.957** (0.059)	1.918** (0.100)
Friend of My Enemy	**1.160** (0.026)**	0.774** (0.055)	1.883** (0.102)
Cumulative No. of Past MIDs	**0.107** (0.007)**	0.017** (0.001)	0.012** (0.003)
Capability Ratio	-0.000** (0.000)	-0.001** (0.000)	-0.006** (0.001)
Alliance Ties	—	0.165** (0.056)	-0.543** (0.144)
Constant	0.453** (0.026)	-1.928** (0.097)	-3.759** (0.137)
Model Statistics	N=647,567 χ^2 = 7,406.0 R^2 = 0.685	N=77,494 χ^2 = 4,750.3 R^2 = 0.472	N=77,549 χ^2 = 2,047.8 R^2 = 0.395

Notes: Estimates of years of no alliance/years of peace and of cubic splines not inserted in the interest of space.

[+] N's the alliance equations are based on all dyads; for MIDs and wars, N's are based on politically relevant dyads. Analyses of MID/War for all possible dyads yielded similar (and even more significant results for imbalanced relations effects)

Table 5: The Causes of Relational Imbalance

Independent/ Control Variable	Dependent Variable		
	Indirect Imbalances	**Direct Imbalance**	**Combined Imbalances**[+]
Third Party MID	0.042 (0.025)[α]	0.327** (0.070)	0.123** (0.027)
Strategic Rivalry	0.232** (0.089)	1.392*** (0.139)	0.511** (0.087)
Distance	-0.000** (0.000)	-0.001** (0.000)	-0.001** (0.000)
Status of Dyad	0.281*** (0.017)	0.403** (0.036)	0.357** (0.016)
Minimum Democracy	-0.001** (0.090)	-0.007** (0.002)	-0.002* (0.001)
Joint Trade	-39.036** (5.194)	-19.057 (10.733)	-74.393** (6.567)
Standardized IGO Similarity	4.935** (0.141)	4.482** (0.533)	6.504* (0.171)
Capability Ratio	0.000*** (0.000)	-0.001** (0.000)	-0.001** (0.000)
Cumulative No. of Past Conflicts	-0.002 (0.003)	0.024** (0.004)	-0.004 (0.003)
Constant	0.186* (0.082)	-6.305** (0.443)	C_1=-10.848** C_2=-7.967** C_3=-5.169**
Chi-Square	19,941.12**	2,66.69**	16,021.14**
N	203,685	203,789	203,648
Pseudo R^2	0.466	0.423	0.402

Notes: [α] Entries in parentheses are robust standard errors.

* *p<.05;* ** $p < .01$

[+] Ordered logit with noimbalance years and cubic splines.

Table 6: The Effect of Imbalanced Relations on Dyadic Conflict and Cooperation—Rare Event Logit Analysis, 1816-2000

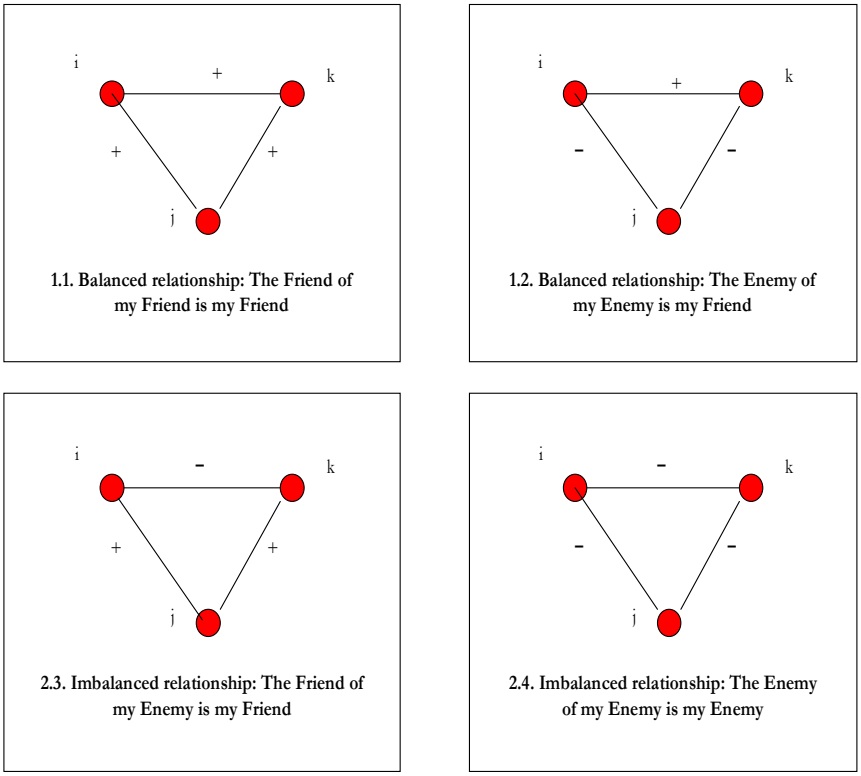
Independent/ Control Variable	Dependent Variable		
	Alliance Initiation	MID[+]	War[+]
Minimum Regime Score	0.002* (0.001)[α]	-0.003** (0.001)	-0.005** (0.001)
Distance	-0.001** (0.000)	-0.001 (0.000)	0.001** (0.000)
Capability Ratio	0.001** (0.000)	-0.001** (0.000)	-0.009** (0.001)
IGO Similarity	5.350** (0.256)	-0.354** (0.094)	-1.198** (0.214)
Cumulative MIDs	0.032** (0.003)	0.026** (0.001)	0.044** (0.003)
Lagged Combined Imbalanced Relations	-1.259** (0.228)	0.444** (0.056)	1.680** (0.116)
Constant	-5.741** (0.201)	-1.097*** (0.096)	-1.706** (0.168)
LR Chi-Square	4,284.7**	2,469.55**	1,673.02**
N	479,439	69,371	69,371
Pseudo R^2	0.214	0.450	0.309

Notes: [+] MID and War equations use the population of politically relevant dyads; the alliance equation uses all dyads.

[α] Robust standard errors in parentheses

** p < .05;* *** p < .01*

Figure 1: Balanced and Imbalanced Enmity Relationships



Endnotes

[1] Maoz (1990: 193-215) called this the ally's paradox. See Also Snyder (1997). Christensen and Synder's (1990) chain-ganging process addresses a similar issue.

[2] This argument can be seen to support either the bipolarity produces conflict argument (Deutsch and Singer, 1964), or the argument that any small perturbations from strict capability parity produce conflict (Waltz, 1979).

[3] Saperstein (2004) argues that Lee, Zinnes, and Muncaster's (1994) equations suggest a high probability of conflict between poles. By introducing some uncertainty into the "enemy of my enemy" principle these risks are reduced but not eliminated.

[4] A triad is balanced if and only if the sum of signs of all dyadic ties is positive (Wasserman and Faust, 1997: 226; Harary, Norman, and Cartwright, 1965).

[5] The main diagonal of Matrix EE_t (ee_{ii}) denotes the number of conflict dyads (enemies) for each state.

[6] Note the order inversion in the matrix multiplications. This is so because friends of enemies (FE_i) are obtained by multiplying the rows of matrix E_t by the columns of matrix A_t, and adding through. In E_t row entries e_{ik} denote all the enemies of state *i*. In matrix A_t, columns represent all the friends (allies) of state *j*. The same logic applies to the generation of the EF_t matrix.

[7] This is a simple presentation based on binary friendship/enmity relations. This analysis can be easily extended to friendship/enmity relations involving intensity of hostile interactions or degrees of alliance commitment (e.g., Maoz, 2006b). This is done in a subsequent study.

[8] See Gibler and Sarkees (2004). Can be downloaded at http://cow2.la.psu.edu/.

[9] Some may object to this definition, in that it does not reflect deeper perceptions of hostility, mistrust, and an intent to harm or destroy another state. Likewise, one may argue that strategic friendship refers to cases where two states have strong and autonomy/reducing commitments

only. Accordingly, we used more restrictive definitions of enmity and friendship, as follows. Enmity was defined only for war dyads. Thus, an enemy of an enemy was defined only for dyads that had a COW interstate war with the same third party during the same year. Likewise, the restrictive definition of friendship was limited to states that had a defense pact with each other; less binding alliances (e.g., nonaggression pacts, entente pacts, etc.) did not count as friendship. The results with these restrictive definitions are largely similar to the ones presented below; they are reported in the project's Website: http://psfaculty.ucdavis.edu/zmaoz/datasets.html.

[10] Downloaded from http://weber.ucsd.edu/~kgledits/mindist.html. We use distance rather that the simpler contiguity coding because we analyze MID and Wars only in politically relevant dyads that are overwhelmingly contiguous. Thus the continuous distance variable generates more geographic variability within this population.

[11] Barbieri, Keshk, and Pollins (2002).

[12] Marshall and Jaggers (2004).

[13] Pevenhouse, Nordstrom, and Wranke (2004).

[14] Note that, when running this analysis on all possible dyads, enemies of enemies are *eleven* times more likely fight each other in MIDs and about *sixteen* times more likely to fight wars with each other than expected by chance alone.

[15] These arguments are based on analysis based on a collapsed dataset that aggregates over each dyad over its entire history (e.g., Maoz, 2004). A tabulation of the characteristics of imbalance by dyadic characteristics for this aggregated dataset reveals these patterns.