CHAPTER 12

Linkages between Enduring Rivalries

The previous chapter focused on one way that the international environment influences enduring rivalries: systematic shocks provide the occasion for the initiation and termination of many rivalries. Within the punctuated equilibrium framework, it is not so much the structure of the international environment that matters, but rather the change in that structure. Systemwide shocks are but one environmental factor that influence enduring rivalries. In this chapter, we investigate another key one: the linkage between a given rivalry and other enduring rivalries in the international system.

We propose that linkage to a "favorable" international rivalry environment constitutes one reason for increased stability and severity of a given enduring rivalry. Close ties between enduring rivalries reinforce rivalry stability (duration) and increase the severity of enduring rivalry. Here, we focus on rivalry severity and leave on the agenda the connection between severity and stability. Nevertheless, we note that there is a clear tendency for more severe rivalries to be longer-term ones. As we discussed in chapter 3, many wars take place in longer-enduring rivalries.

The dominant trend in recent years has been to focus on dyadic aspects of international conflict. The rivalry approach with its emphasis on dyadic relationships over time fits within that general trend, as it stresses the links between conflicts *within* dyads. Nevertheless, we cannot ignore the impact of the broader environment on these dyads. The punctuated equilibrium model, like all natural selection models, focuses on the importance of system-level factors. Similarly, we investigate the linkage *between* rivalries.

The war diffusion literature provides the most relevant theoretical and empirical guideposts to our linkage framework. The academic and practitioner literature is filled with metaphors on the expansion of conflict. Most are references to passive processes, such as contagion or diffusion, but equally common are the notions of bandwagoning, domino effects, and proliferation, which imply a more purposive connection between different conflicts. What all these metaphors have in common is an emphasis on how conflicts are interrelated

to one another over space and time. Similarly, our analysis suggests that exogenous factors, here other rivalries, influence the evolution and dynamics of rivalry behavior. Certainly rivalries develop and evolve from many internal influences: regional or global ambitions, territorial and ethnic competitions, and power transitions to name a few. Yet, a focus solely on the internal components of rivalry behavior ignores that some enduring rivalries are connected with one another across space and time. That is, the dynamics of one rivalry may affect the conflict and wars that occur in the other rivalry, including increasing the severity or volatility of the BRLs. For example, the rivalry between Syria and Israel (and its propensity to escalate to war) was influenced by the course of the Israel–Egypt rivalry. Equally or more significant, some minor-power rivalries may be linked to higher-order competitions between major powers. Continuing with the same Middle East example, the superpower competition between the United States and the Soviet Union conditioned the actions of their patron states in the Arab-Israeli rivalries. The methods of these linkage influences are varied, including political pressure, arms transfers, alliance ties, and the like. Nevertheless, the evaluation of rivalry behavior may be incomplete without consideration of how that behavior is influenced by, or influences, other international conflict.

Looking at how rivalries are linked with one another has a dramatic impact on how one would construct strategies for conflict management. If the behavior of rivalries is conditioned by exogenous factors, then a conflict management strategy that concentrates only on the behavior and concerns of those two states may be misguided. The actions of third-party states may serve to either enhance or undermine efforts to regulate or resolve the competition between the rivals; perhaps not surprising then, the cooperation of third-party actors is crucial in some UN actions such as peacekeeping (Diehl 1994a), even when the primary parties are supportive of international intervention and mediation. If linkages exacerbate conflict, conflict managers may need to take steps, to the extent possible, to prevent or limit such interconnections. The success of the American-led forces in containing the conflict and defeating Iraq in the Persian Gulf War was, in part, a consequence of preventing Saddam Hussein from linking that conflict to the Arab-Israeli rivalries (which he tried to do by provoking an Israeli retaliation against Scud missile attacks). Less obvious is that linked rivalries suggest that the way to manage or resolve rivalry A could be by diplomatic initiatives directed at rivalry B or C. This type of strategy generally runs counter to most conflict management strategies, which tend to focus on severe crises between the given actors without concern for the fallout from these crises or the long-term consequences of those interventions. Thus, amelioration of tensions in some Southeast Asian rivalries did not occur until there was moderation in the hostility between the United States and its rivals China and the Soviet Union respectively.

The concept of linkages across rivalries dyads implies that conflict management involves regional and perhaps global solutions to interstate conflict problems. This may make conflict resolution more difficult, and perhaps elusive, but this view may be more realistic than narrow and short-term strategies that yield limited results. Finally, even if conflict management is problematic, at least the linking of rivalries may be an early warning indicator of worsening conflict or war. Decision makers may be able to adjust their strategies and behaviors accordingly, thereby avoiding mistakes from misperception or poor planning.

While our linkage framework shares some similarity with the war diffusion literature, notable differences exist. In the next section, we analyze how our rivalry approach differs from traditional studies of contagion and war expansion. We then discuss how rivalries can become linked and delinked with one another, and we empirically describe the patterns of those processes. Our primary analyses concern the impact that linkage has on conflict patterns in enduring rivalries.

War Diffusion or Rivalry Linkage

As we first suggested in chapter 4, the scholarly literature offers a number of different ways in which conflicts are connected to each other, what we refer to as linkage. The predominant concern has been with how conflict can spread from one area to another or from one set of countries to another. To mix metaphors, the concern is with how conflict can "spill over" or "diffuse" into neighboring areas. In contrast, we propose a model of rivalry linkage to understand how linked enduring rivalries can be mutually reinforcing.

When comparing rivalry linkage with war diffusion, one must keep in mind the fundamental difference in the focus of analysis. Here we focus on enduring rivalries, while the war diffusion literature uses individual—usually not dyadic—conflict. This has a number of key consequences. At the top of the list lies the direction of causality. The work on conflict diffusion (for a review, see Most, Starr, and Siverson 1989) generally explores how conflict involving nation A at time t influences the likelihood of conflict at time $t + 1$ involving nation B. Rivalry linkage stipulates that the severity and stability of rivalries AB and CD are influenced by their *mutual* linkage. In short, the war diffusion literature sees the causal influence running in one direction (along with time), whereas with rivalry linkage it usually runs in both directions.

The mechanisms of conflict diffusion are sometimes unspecified (e.g., Davis, Duncan, and Siverson 1978), sometimes limited to facilitating conditions such as geographic proximity; other times causal mechanisms such as alliances are studied (Siverson and Starr 1991). One of the major failings of the diffusion literature is imprecision concerning the different ways that war actually spreads. Fundamentally though, war produces a profound effect on the relationship between a warring party and one or more of its neighbors. One

scenario is that a neighboring state joins the ongoing war, because of alliance ties or because its national security interests are directly affected. A neighboring state may also be drawn into a war, as the fighting does not respect national boundaries; the spread of the Vietnam War into Cambodia is an example. A neighbor may also take advantage of the preoccupation of a warring state to attack it, in effect starting a new war rather than directly joining the existing conflict. In addition, the diffusion literature envisions scenarios in which the probability of war between states C and D is influenced by an ongoing war between states A and B. The ongoing war may alter the power distribution in the region, rearrange existing alliances or relationships, or create new opportunities for conflict. Although these are all possibilities, diffusion research often makes no distinction among them and does not test for their relative propensity. In part, this may account for why the work on diffusion has consistently uncovered only weak, albeit statistically significant, relationships.

There are other studies related to the diffusion literature. Scholars who study "bandwagoning" and "balancing" behaviors (Walt 1987; Jones 1994) consider how states intervene in ongoing conflict, and this gives a more purposive explanation than the standard diffusion literature. Nevertheless, such studies cannot assess how two or more *different* conflicts affect each other, being able to account only for the *expansion* of existing war and not the creation of a new conflict. Spatial autocorrelation studies (e.g., Anselin and O'Loughlin 1992) more closely relate to our analysis of rivalry linkage. There the spread of conflict occurs simultaneously, and the analyses include explanations for the presence and strength of conflict dependence on a regional level. Nevertheless, such studies are geographically based and do not consider the nongeographical causal factors explaining how conflicts might be intertwined.

The diffusion literature and its variants do not provide a suitable framework for understanding how enduring rivalries are related to one another. More closely akin to our analyses are some models of world wars that explicitly note the intersection of conflicts as fundamental in producing a global war. Midlarsky (1988) refers to the *overlap* of conflicts, noting that such connections may be key to understanding how systemic war might spread. He cites the example of German actions against France and Russia at the outset of World War I as a result of Germany's perceived need to show unconditional support of Austro-Hungarian actions against Serbia. Vasquez (1993; see also Vasquez 1998 for an application) extends Midlarsky's analysis by focusing on more than just alliance or other linkages between different actors and conflicts. Vasquez also notes that issues can become linked across conflicts. Such issue linkage can increase the probability of world war if (1) the issues in one conflict become associated with more violence-prone territorial issues in another conflict, (2) the resolution of one crisis is inhibited by escalation in another crisis, or (3) crises linger and accumulate over time (which is critical in Midlarsky's model).

Vasquez explicitly cites the presence of a serious rivalry as a condition that might lead a war to expand to global conflict. He argues that rivals (here major powers since they are a prerequisite for a world war) can limit the conflict behavior of their allies or develop rules and norms of action among themselves so that the management of the primary major-power rivalry is not jeopardized. Whatever the explanations, both models of world wars are based on the assumption that different conflicts or rivalries are interrelated, and that such a connection is a critical component in producing world wars. What these studies lack for our purposes (which are different from those of Midlarsky and Vasquez) is an understanding of how conflicts affect each other in the absence of world wars and how minor-power conflict is linked to other minor-power conflict.

An analysis of militarized dispute behavior (including war and lower-level conflict) found that multiparty disputes tended to last longer and be more severe than dyadic disputes (Gochman and Maoz 1984). These results apply only to single integrated disputes, but the logic might be equally applicable to different disputes that implicitly are multiparty because of the linkages between different rivalries. The logic might also be extended from single disputes to rivalries as a whole. Taken together, the studies of world wars and individual disputes suggest that interconnected rivalries will have an exacerbating effect on conflict.

A few studies explicitly consider the impact of specific rivalries on one another. Empirically, Goldstein and Freeman (1990) explore the triangular relationship in the Cold War period between the United States, the Soviet Union, and China and find modest support for the effect of dyadic interactions on other conflict relationships (see also Ashley 1980). For example, the warming of relations between the United States and China in the Nixon administration was largely to shore up each state's position vis-à-vis their Soviet rival. Throughout the Cold War, there was significant discussion of proxy conflicts in the Third World, but little of this interest was translated into research on the interconnection of superpower conflict and conflict between less developed states.

Muncaster and Zinnes's (1993) framework includes provisions, through a networking system, for the relationship of states C and D to change with the disputatious behavior occurring between states A and B; much of this is based on the classic formulation, "The friend of my friend is my friend . . ." Schrodt and Mintz (1988) explore how the conditional probabilities of dyad interactions are affected by other dyadic interactions. In a limited test of some Middle East countries, they find a high degree of interdependence in the frequency of events, although they cannot specify whether such interdependence produces more conflictual or cooperative actions. They do, however, note that the actions of one dyad increase, but do not constrain, other dyadic interactions.

In summary, the punctuated equilibrium model stresses how that individual enduring rivalry has links to the larger enduring rivalry system. The stronger the linkage between the rivalry and the relevant rivalry environment, the more

stable and more severe the enduring rivalry. An international system with severe and long-term enduring rivalries between major powers provides a setting that encourages both the major-power as well as minor-power enduring rivalries. In much of our earlier discussion of the punctuated equilibrium model we emphasized the organizational and domestic factors in their stability, but now we examine how linkage to other enduring rivalries can exacerbate an enduring rivalry.
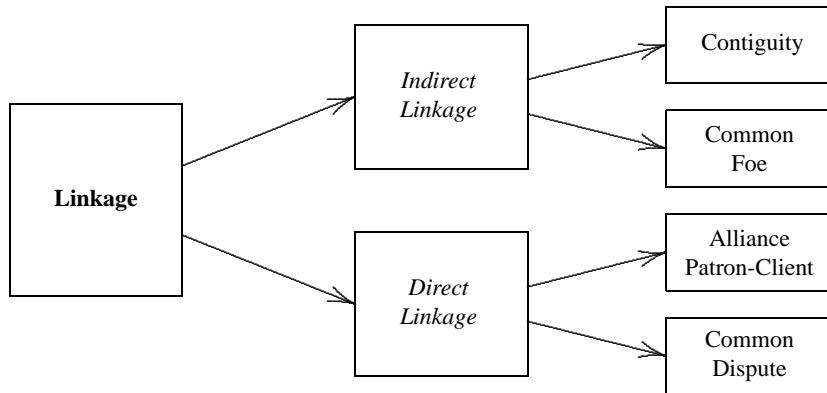
Forms of Rivalry Linkage

We need to give concrete expression to the general notion of linkage. Unlike the war diffusion literature, which treats contiguity and alliances as *different and independent of one another,* we prefer to use the overarching concept of linkage, which can take various forms. Just as power can be enhanced through a variety of mechanisms (arms, conscription, alliances), so too can linkage be strengthened or weakened by various elements, some of them not under the control of decision makers. In testing the effects of linkage, we are concerned not only with the individual forms of linkage, but also with linkage as a whole.

Not all rivalries are linked to one another in space and time. We assume that enduring rivalries have varying degrees of linkage and that such linkage is confined to sharing the same temporal space (we assume the latter for simplification purposes and recognize that cross-temporal linkages are possible, although less likely). Linkage can take different forms with varying intensities, and we consider those connections that are clear and/or involve security issues as "direct" linkage. There are several ways in which rivalries can be directly linked. Most obviously is the connection of states in different rivalries through alliance ties. States that are allies have similar security concerns, and the interdependence of those security interests lead the actions of one state to have an impact on the interests of its allies. They have also made an explicit choice to connect their mutual security fates. Rivalries in which the participants are aligned on opposite sides with states in another rivalry would seem to have the tightest linkage. The rivalry between the two Koreas was therefore closely linked with the rivalries involving the United States, the Soviet Union, and China.

Not all rivalry behavior is directly linked through formal alliances. It may also be the case that ties across rivalries are strong, yet informal. Throughout the Cold War, the superpowers were heavily involved in "proxy" conflicts between other states in the world. The conduct of those proxy conflicts in Asia, Africa, and the Middle East were influenced by the political support, arms transfers, and military aid provided by the superpowers. The end of the Cold War produced fewer manifestations of superpower competition that exacerbated the lower-level rivalries, leading to some peace settlements (e.g., Cambodia, Angola).

FIGURE 12.1: Forms of Rivalry Linkage

```
                                                    ┌──────────────┐
                                                    │  Contiguity  │
                                  ┌──────────┐  ────▶└──────────────┘
                                  │ Indirect │
                              ───▶│ Linkage  │  ────▶┌──────────────┐
                                  └──────────┘       │   Common     │
              ┌──────────┐                           │    Foe       │
              │          │                           └──────────────┘
              │ Linkage  │
              │          │                           ┌──────────────┐
              └──────────┘                           │   Alliance   │
                                  ┌──────────┐  ────▶│ Patron-Client│
                              ───▶│  Direct  │       └──────────────┘
                                  │ Linkage  │
                                  └──────────┘  ────▶┌──────────────┐
                                                     │   Common     │
                                                     │   Dispute    │
                                                     └──────────────┘
```

Finally, rivalries can be directly linked by the intersection of common security interests among the participants, even in the absence of an alliance. The most notable example of this is when states have a common enemy, as is the case with Egypt's and Jordan's rivalries with Israel. If rivalries become closely linked in this fashion, they can begin to form what Buzan (1983) calls a "security complex." A security complex is "a group of states whose primary security concerns link together sufficiently closely that their national securities cannot realistically be considered apart from one another. Security complexes tend to be durable, but they are neither permanent nor internally rigid" (1983, 106). Although security complexes are broader than rivalries, these rivalries and related conflicts are often at the heart of the complex and define its parameters. Indeed those who adopt security complexes as a framework for analysis are urged to focus attention on "sets of states whose security problems are closely interconnected" (1983, 113–14). For example, in South Asia, the India–Pakistan rivalry affects the relationship that each of those states has with its neighbors, especially China.

There are other instances in which the connection between rivalries is much looser, and we label these linkages "indirect." To be indirectly linked, the conflict issues involving the two sets of rivals may not be intimately connected, but nevertheless share some common concerns. It may also be the case that rivalries exist in the same geographic region and the actions of one rivalry influence regional relations and the balance of power such that other conflicts in the area are affected. We do not expect that the impact of rivalry linkage will be as great for indirectly linked conflicts, and it is possible that the effects may even be the opposite of direct linkage.

Our conception of linkage has several components that figure 12.1 illustrates. The kinds of linkage that we study do not necessarily exhaust the universe of possible forms. These four forms do, however, represent good starting points, with at least two of them (contiguity and alliances) having received extensive prior study. Because we do not consider these linkage forms as independent, we are also interested in how they interact. In particular, we suspect that they interact in a synergistic fashion.

Most forms of linkage result from the conscious actions of the rivalry participants. Linkage by contiguity is outside the immediate control of governments, but linkages by dispute, alliance, or common foe arise from actions taken by those governments. Key to understanding linkage and its effects is to understand when rivalries link and delink.

Just because rivalries are linked with one another does not necessarily mean that such linkage is constant throughout the two rivalries. Some rivalries may indeed run identical courses from start to finish. Nevertheless, because rivalries begin and end at different times, their intersection can be far from perfect. Furthermore, the basis for their linkage (i.e., alliances, common security concerns, etc.) may arise sometime toward the middle or even the end of the respective rivalries. Thus, we recognize that the linking of rivalries does not imply that such connection exists from the outset of either rivalry. Symmetrically, rivalries can be "delinked" as well as linked. The severing of the strings that tie the rivalries together or the end of one of the rivalries itself can signal that two sets of military competitions are no longer influencing one another. We suspect, however, that rivalry linkage occurs early in rivalries and remains in place until near the end of the competitions. This expectation is consistent with our punctuated equilibrium model characteristics of a quick lock-in to rivalry patterns and an absence of a fade-out effect.

Of course, enduring rivalries will be largely unrelated to some other rivalries. The diffusion literature tends not to distinguish between direct, indirect, and unlinked conflict and considers only two forms of linkage (formal alliances and contiguity); perhaps this is another reason why the diffusion effect is found to be so weak. We consider other forms of linkage (patron-client relationships, common foes, and common confrontations) in addition to those specified in the diffusion approach. Beyond different forms of rivalry linkage, we also consider it important to specify the casual direction or hierarchy in the effects that flow from that linkage, although we do not fully explore this aspect in the empirical analyses below.

Linkage and the Hierarchy of Causation

A key issue is the causal order by which some international conflicts affect other conflicts. As noted above, in diffusion models, this is achieved by temporal ordering, but we attempt to explain what in some cases are almost simultaneous effects across space. We see some rivalries as the *result* or *consequence*

of others (or at least made much worse). In our view, many of the effects occur in a hierarchical fashion with major-power rivalries influencing the dynamics of minor-power rivalries. For example, the continuation of the rivalry between North Vietnam and Thailand was, in part, facilitated by the Vietnam War. This relationship may sometimes produce conflict abatement. Ameliorated relations with one opponent may be the result of an intensified enduring rivalry with another competitor. Nonhierarchically linked rivalries are ones in which the causal arrow runs strongly in both directions. The linked rivalries before World War I typify such cases. Although some may argue that occasionally, notably involving the United States and Israel, the tail wags the dog, it is not surprising to encounter "patron-client" terminology with its implicit causal arrow.

The concept of a casual hierarchy of conflict is not unknown in the international conflict literature, although it is the exception more than the rule. Although not directly tied to rivalries, "nested games" (Tsebelis 1990) deal with the interrelationship of two decisions in what appear at first glance to be separate games. In actuality, one decision is nested in—that is, part of a larger game—and an understanding of strategy requires an understanding of that interrelationship. Thus, what may appear to be a suboptimal choice at one level is actually optimal in the context of the higher-level game. Instead of "nested," we prefer the concept of "linked." Although the hierarchical character of nested games is reflected in some rivalries, in other cases the rivalries are relatively equal vis-à-vis each other. Applied to rivalries, one might conceive of some rivalries being linked in a hierarchical sense with other conflicts, such that rivalry interactions at one level may be conditioned by concerns of another rivalry. For example, a United States–Cuba rivalry may be nested in the larger U.S.-Soviet rivalry; the state of the latter may influence U.S. behavior in the former. Directly relevant to our concerns, Kinsella (1994b) finds that the arms transfers of the superpowers have some effect on the conflict occurring in minor-power rivalries in the Middle East, although the effect is neither primary nor uniform. Similarly, McGinnis (1990) posits that the security of regional rivals is influenced by arms transfers and alignments. Another rivalry, especially those involving major powers, may affect the availability and cost of those elements.

One distinction that we believe is crucial (there may be others) is the power status of the rivals. The direction of causation depends on that power status. The "power hierarchy" creates a causal one whereby "higher" level rivalries (between major powers) influence lower-level ones, but not vice versa. That is, conflict between or involving major powers is presumed to have a significant asymmetrical effect on minor-power conflict. Major powers, through the encouragement of proxy conflicts, arms transfers, military and economic aid, and a range of other policies, can affect the course of conflicts involving smaller patron states. In those cases, we assume a hierarchy of major-power rivalry or conflict "causing" minor power conflict.

FIGURE 12.2: Hierarchy of Causation
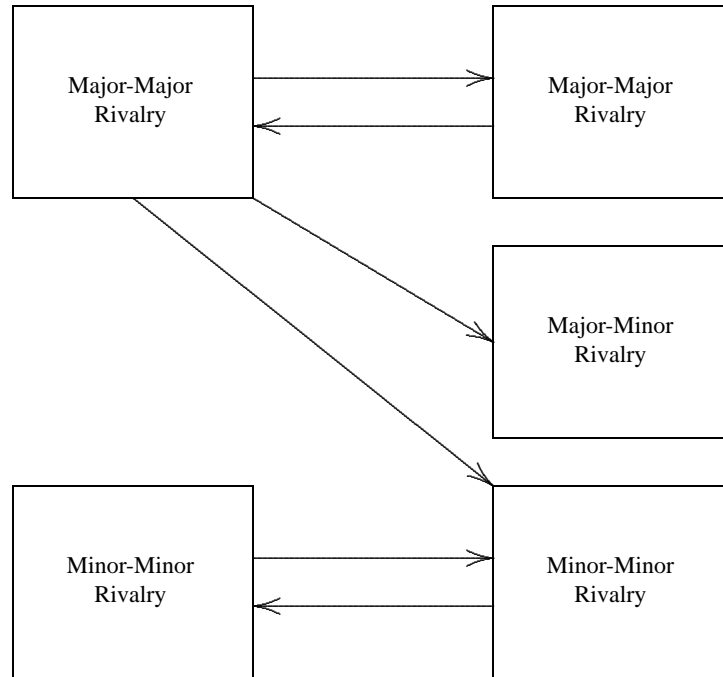
Although we study the linkages of only enduring rivalries here, one could use the same principle in establishing the direction of causality between enduring rivalries and those competitions of a lesser magnitude and duration, what we have referred to as proto-rivalries and isolated rivalries. We assume that states pay more attention to their most critical security threats and that all other conflict is, at least in part, conditioned by the dominant security concern. Thus, for example, Cold War tensions influenced U.S. policy toward both its allies and small states at their periphery, such as Vietnam and Angola. Enduring rivalries are assumed to be the most salient conflicts. They last the longest, reflect fundamental security concerns, and provide the greatest threat of war. We assume therefore that enduring rivalries will be hierarchically above lower-level international conflict. The hierarchy of causation patterns that drive our analyses are illustrated in figure 12.2. The basic principle is that when power is symmetrical, causality is symmetrical. In figure 12.2, we see two-directional causal arrows between major-power rivalries and between minor-power rivalries. In cases of power asymmetry, such as between a major-power rivalry and a minor-power one, the causal arrow goes only in one direction.

Research Design

Rivalries and conflicts are said to be directly linked if one of the following criteria is met during the lives of the two rivalries. First, rivalries are directly linked if each rival is connected to a state in the other rivalry through a formal alliance (for a list see Small and Singer 1969)[1] or an established patron-client relationship.[2] Thus, for example, the United States–Soviet Union rivalry is directly linked to the Israel–Egypt rivalry during the Cold War. Some of the recent diffusion literature (Siverson and Starr 1991) identifies alliances as one agent of the diffusion effect, but we add the possibility of patron-client relationships, which may tie states even more closely together than formal alliances. A second way of establishing direct linkage is if both rivalries share at least one of the same militarized disputes as a part of each's rivalry ("common dispute"). Continuing with the above example, the 1973 Arab-Israeli War is common to both the Israel–Egypt rivalry and the superpower rivalry. Either the presence of an alliance or a common dispute involving all rivals suggests a strong interrelationship between the two rivalries. The expectation that the rivals are influenced by the other rivalry seems reasonable.

We first define rivalries as indirectly linked when at least one rival is geographically contiguous (Gochman 1991) to at least one state in another rivalry.[3] An AB rivalry is linked to a CD one if state A or B is contiguous to state C or D. Using contiguity as a measure of indirect linkage is consistent with the diffusion literature, which relies extensively on shared borders for the spread of conflict (Most, Starr, and Siverson 1989). Enduring rivalries are indirectly linked by common foe if one of the rivals is simultaneously involved in both rivalries; for example, the rivalry AB is indirectly linked to a rivalry involving states B and C. We exclude those cases of major-minor rivalries that are linked by common foe to other major-minor rivalries. Major powers are capable of participating in several different rivalries simultaneously, sometimes in different parts of the world; the connection between these rivalries is often tenuous at best. Eliminating these instances allows us to ignore superficial linkages such as that between the France–Ottoman Empire rivalry and the France–China rivalry in the nineteenth century, which have no substantive connection and would seem to exercise no constraint on the French ability to act in either case.

---

[1] We use one of the latest versions of the Correlates of War Project list of alliances, which extends from 1816 to 1984. For the period after 1984, we assume that all alliances in existence at the outset of the period continue throughout the whole period. The exception, of course, is the Warsaw Treaty Organization (WTO), but this does not affect any of our linkages after 1984.

[2] From our own estimations, we coded the patron-client relationships, and they are listed on the web site described in Appendix A.

[3] We made one slight change in that we did not code the United States and the USSR as contiguous despite the proximity of Alaska to Siberia across the Bering Straits. In addition, we chose to ignore colonial borders as indicative of contiguity, given that such contacts between states are more peripheral and less important empirically than homeland borders (Goertz and Diehl 1992b).

Rivalries with two major powers (Small and Singer 1982) are considered hierarchically above rivalries involving at least one minor power. Because of the principle of hierarchical causality elucidated above, we consider only the effect that linkages have on the conflict behavior of rivalries involving at least one minor power. Thus, because we believe major-major power rivalries are causal agents in the linkage effect, and therefore that their conflict patterns are not altered by linkage, we drop these 12 cases from the analysis.[4] The incidence of war in rivalries is again defined by the presence of a military conflict resulting in one thousand or more battle-related fatalities (Small and Singer 1982). For our analyses, the basic rivalry level again will be considered the mean conflict level (first introduced in chapter 9) and the volatility defined as its variance over the course of the rivalry. We will be concerned with how the BRLs of linked rivalries fluctuate in conjunction with one another.

Empirical Results

Descriptive Analysis

Our first set of analyses concerns the extent to which enduring rivalries are linked and the form that those linkages take. Our expectation is that rivalries higher on the hierarchical ladder are more likely to be linked to one another. Major-power rivalries are so important to the international system that those that take place simultaneously will be likely to influence one another. The small number of major powers at any given time and the limited geographic constraints on major powers also seem conducive to rivalry linkage. We do not have preconceptions about which forms of linkage will be predominant. In table 12.1, we identify the total number of rivalries that are linked to a particular rivalry as well as the four possible forms (two types of direct and indirect connections respectively) those linkages might take.

The most stunning finding is that all but one enduring rivalry (Honduras vs. Nicaragua) is linked to at least one other rivalry at some point in their existence by alliances (including patron-client relationships), contiguity, common dispute participation, or common foe in overlapping time periods. The average enduring rivalry is connected to approximately 17 other rivalries, many times connected by multiple forms of linkage (e.g., both alliances and common foe forms). Alliances are the most frequent method of linkage; the average rivalry is linked to 14.4 other rivalries through alliances. Geographic proximity is, not surprisingly, also a prominent form of linkage, especially among the large number of rivalries in the dense area of states in Europe. Overlapping disputes are not as common as one might have expected. This illustrates that rivalries may

---

[4]Empirically, their inclusion does not dramatically affect the results reported below, and the conclusions that we draw from those analyses would not change by their inclusion.

TABLE 12.1: Number and Types of Linkage with other Enduring Rivalries

Rivalry	Begin	ERs	Cli	Foe	Ctg.	All.	Dsp.	Lks.
USA–Cuba	1959	26	9	5	0	16	1	31
USA–Mexico	1836	2	0	2	0	0	0	2
USA–Ecuador	1952	28	9	6	2	18	0	35
USA–Peru	1955	28	9	6	3	18	0	36
USA–UK	1838	4	0	3	2	2	1	8
USA–Spain	1850	5	0	2	3	4	1	10
USA–USSR	1946	38	16	10	15	26	13	80
USA–China	1949	34	12	9	13	25	7	66
USA–N. Korea	1950	34	9	6	12	27	4	58
Honduras–Nicaragua	1907	0	0	0	0	0	0	0
Ecuador–Peru	1891	9	0	2	4	9	0	15
Brazil–UK	1838	4	0	1	1	3	0	5
Chile–Argentina	1873	1	0	0	1	0	0	1
Chile–Argentina	1952	7	0	0	2	7	0	9
UK–Germany	1887	16	0	5	9	13	10	37
UK–USSR	1876	16	1	6	15	16	2	40
UK–USSR	1939	39	15	6	18	34	13	86
UK–Ottoman Empire	1895	18	0	6	12	18	10	46
UK–Iraq	1958	27	0	4	11	25	5	45
Belgium–Germany	1914	18	0	3	13	16	15	47
France–Germany	1830	9	0	1	7	8	0	16
France–Germany	1911	18	0	4	13	17	15	49
France–Turkey	1897	18	0	6	16	17	10	49
France–China	1870	11	0	4	9	4	2	19
Spain–Morocco	1957	15	0	1	1	15	0	17
Germany–Italy	1914	18	0	6	11	16	15	48
Italy–Yugoslavia	1923	22	0	4	6	21	7	38
Italy–Ethiopia	1923	16	0	3	6	16	7	32
Italy–Turkey	1880	18	0	7	13	15	10	45
Yugoslavia–Bulgaria	1913	18	0	2	9	16	11	38
Greece–Bulgaria	1914	20	0	2	7	20	10	39
Greece–Turkey	1866	16	0	5	11	11	10	37
Greece–Turkey	1958	21	0	1	14	15	1	31
Cyprus–Turkey	1965	20	0	1	13	16	1	31
USSR–Norway	1956	30	14	5	16	17	3	55
USSR–Iran	1908	41	15	8	30	32	1	86
Russia–Turkey	1876	17	0	8	17	14	10	49
USSR–China	1862	45	17	12	31	29	2	91
USSR–Japan	1895	44	15	9	27	33	10	94
Congo Brazz.–Zaire	1963	6	0	0	2	6	0	8
Uganda–Kenya	1965	6	0	0	3	6	0	9
Somalia–Ethiopia	1960	7	0	1	3	5	0	9
Ethiopia–Sudan	1967	7	0	1	5	6	0	12
Morocco–Algeria	1962	15	0	1	1	14	0	16
Iran–Iraq	1953	21	0	4	18	15	2	39
Iraq–Israel	1967	15	0	7	11	14	4	36

Continued on next page

TABLE 12.1—*continued*

Rivalry	Begin	ERs	Cli	Foe	Ctg.	All.	Dsp.	Lks.
Iraq–Kuwait	1961	15	0	3	10	13	3	29
Egypt–Israel	1948	17	0	4	7	16	6	33
Syria–Jordan	1949	14	0	2	11	9	4	26
Syria–Israel	1948	14	0	5	11	11	6	33
Jordan–Israel	1948	11	0	5	9	11	4	29
Israel–Saudi Arabia	1957	11	0	5	9	11	4	29
Saudi Arabia–N. Yemen	1962	13	0	1	11	10	0	22
Afghanistan–Pakistan	1949	24	0	1	12	23	0	36
China–S. Korea	1950	19	3	6	13	13	5	40
China–Japan	1873	31	2	7	13	27	9	58
China–India	1950	15	3	5	13	9	0	30
N. Korea–S. Korea	1949	15	0	3	12	14	3	32
S. Korea–Japan	1953	14	0	4	8	6	0	18
India–Pakistan	1947	22	0	2	8	17	0	27
Thailand–Kampuchea	1953	12	0	2	2	10	2	16
Thailand–Laos	1960	15	0	2	6	10	0	18
Thailand–N. Vietnam	1961	15	2	2	6	10	5	25

ERs: Number of linked enduring rivalries.

Cli: Number of patron-client linked enduring rivalries.

Foe: Number of enduring rivalries linked by common foe.

Ctg: Number of enduring rivalries linked by contiguity.

All: Number of enduring rivalries linked by alliance.

Dsp: Number of enduring rivalries linked by common disputes.

Lks: Total number of links.

be linked with one another by more than being part of the same military confrontations and that ignoring other interrelationships when third states are not directly involved in conflict could be misleading.

Our expectation that major powers would have the greatest frequency of linked conflict is largely confirmed. Most of the rivalries that occur after World War II are in some way connected to the superpower or other superpower-related rivalries. In this sense, treating the United States–USSR rivalry as the centerpiece of postwar relations is confirmed here. The Russian-Japanese rivalry is linked to the greatest number of rivalries (44), but this is largely a function of the long duration of that rivalry, although one could make a case that the causal direction here runs both ways. More interesting is the relatively small number of linked rivalries with Latin American rivalries, whose competitions seems to persist in relative isolation, but also from our earlier analyses at relatively lower levels of severity. If such linkage has a substantive impact on conflict behavior, this evidence is a powerful indictment of traditional analyses that look at conflict only cross-sectionally. Of course, it may be that linkage is an essential component for rivalries to become enduring and that an examination of proto-rivalries and isolated conflicts might reveal that linkages are relatively uncommon.

TABLE 12.2: The Timing of Rivalry Linkage

	Ally	Contiguity	Common Dispute	Common Foe
Mean	7.38	–2.95	8.78	10.31
S.D.	16.65	23.76	13.72	19.89

Note: Mean is the time from the onset of the rivalry to the occurrence of the first linkage.

Among the linked rivalries, we are also concerned with when two or more rivalries become tied together. It is conceivable that rivalries could become linked from the outset of each competition, somewhere in the early stages of the rivalries, at "midlife," or toward the end of the rivalries. Of course, this may vary across the two rivalries, as we cannot expect that the rivalries will begin at the same time, although this is true in some cases. It is our expectation that the linkage will occur relatively early in the period of temporal overlap between the two rivalries. The basic rivalry level assumes that there is a fairly rapid lock-in effect in the rivalry competition, as we have demonstrated in chapter 9; rivals adjust quickly to patterns of competition and thus set the tone for the rest of the rivalry. We anticipate that this is also the case with linked rivalries. If such competitions do not include ties to other conflicts toward the outset, then it is not likely that the competition will deviate substantially to incorporate new influences or patterns after the rivalry has reached maturity. The results of this analysis are given in table 12.2.

Across different types of linkage, a rivalry becomes linked to another rivalry within 11 years of its onset, depending on the linkage type, although there is considerable variation within each of the linkage types. The first time that rivalries are linked by a common foe is almost one-third of the way through their lives, again making such a connection a poor early warning indicator. Those rivalries linked by contiguity do so the quickest, even demonstrating a negative time to linkage because contiguity is a constant and the linkage between two contiguous rivalries occurs at the time of the onset of the first rivalry (which may be several years before the other rivalry begins). The average first linkage in all cases begins sometime in the early part of rivalries. After that initial linkage, of course, further ties to other rivalries also occur. This meets our expectations of an early lock-in period and demonstrates that time is tight for conflict managers who wish to avoid the expansion or interconnection of conflict.

Symmetrically, we are interested in patterns of delinkage as well as linkage. We would expect that rivalries become delinked at or around the time of their termination; that is, rivalries stay linked for most of their lifetimes. If one

TABLE 12.3: The Timing of Rivalry Delinkage

	Ally	Contiguity	Common Dispute	Common Foe
Mean	3.15	–3.23	0	6.35
S.D.	17.98	17.86	0	13.47

Note: Mean is the time from the occurrence of the first delinkage until the end of the rivalry.

rivalry ends (especially a major-power one), this may lessen the hostility and facilitate the conclusion of its linked counterpart. Table 12.3 shows when rivalries become delinked. The first incidence of delinkage usually occurs between three and six years before the last dispute in a rivalry, about what was anticipated, and perhaps signaling the beginning of the termination phase of the rivalry.[5] Again, this pattern fits with a punctuated equilibrium model in which there is no gradual fade-out of rivalry conflict behavior, but a quick and coterminous change in all rivalry processes.

The Impact of Linkages on Rivalry Conflict

Above we established that enduring rivalries are strongly linked to one another and that such linkages are present during most years of the rivalries affected. An obvious next step is to ascertain whether rivalry behavior is influenced at all by those linkages. We should note that there is some significant collinearity between different forms of linkage, such that rivalries are often simultaneously connected by more than one mechanism. Table 12.4 details the extent of that collinearity. The correlations range from .12 to .56. Thus, there is some risk that the specific parameter estimates in the regression analyses reported below will be contaminated by covariation of the predictor variables. Thus, we offer some caution to the reader in interpreting such individual standard error estimates, and we prefer to rely primarily upon the degree to which the four linkage types can collectively account for variations in conflict patterns.

We first consider whether rivalries that are linked have a higher mean severity level than those that are not. Our expectation is that linked rivalries will have a greater basic rivalry level than unlinked conflicts. Cross-sectionally, we look at all rivalries and their mean basic rivalry level under various conditions of linkage.[6] Of course, there are many other factors that influence that basic level, beside the exacerbating effects of being linked to other conflict, and thus we expect linkage to be moderately associated with higher BRLs.

---

[5] Of course, the censored data may indicate that this figure is too low.

[6] We include all censored cases in our analyses. Since these have not yet ended, we cannot know for sure their mean severity levels, but (1) we have at least 20 years of rivalry to work with and (2) we find that the BRL in most enduring rivalries is flat, hence unlikely to change from what we already have.

TABLE 12.4: Intercorrelations among Different Forms of Rivalry Linkage

	Ally	Contiguity	Common Dispute	Common Foe
Ally	1.00	.12	.55*	.16
Common foe	.12	1.00	.51*	.56*
Contiguity	.55*	.51*	1.00	.36**
Common dispute	.16	.56*	.36**	1.00

*Significant at .0001. **Significant at .01.

Related to this first expectation is our second prediction that there will be greater variation around the basic rivalry level in linked rivalries. Recall that the punctuated equilibrium model argues that the basic rivalry level is relatively stable over time. Yet the severity of crises does fluctuate, sometimes quite dramatically, around the basic rivalry level. We believe that such volatility is, at least partly, the result of exogenous influences—here the exacerbating impact of conflict from another rivalry. Although two rivals may have developed a way of managing their conflict and keeping it within bounds, that stability may be upset when they become involved on opposite sides of a larger dispute with another pair of rivals. A corollary of this expectation is that war is most likely to occur in linked rivalries, as the disputants are least able to manage their conflict and accommodate their preferences short of war.

The hypothesized exacerbating effect of rivalry linkage should be affected by the directness of the rivalry linkage. The most positive effects should stem from rivalries that are directly linked. Enduring rivalries are thought to be the centerpiece of security complexes and other interstate relations in a given region. Therefore, we expect a strong positive relationship between directly linked enduring rivalries. In other circumstances, enduring rivalries may only be indirectly connected to other rivalries. This means that enduring rivalries are a factor in state calculations, but also that other factors as well may condition the basic rivalry level more.

Table 12.5 reports our analysis of the impact of linkages on the basic rivalry level. First, more than a quarter of the variance is accounted for in this model, impressive considering that a variety of structural and some other exogenous factors, unspecified in the model here, also influence the basic rivalry level. Second, the effects are notable for direct forms of linkage (common disputes) as hypothesized above. Third, we see that the effects of individual forms of linkage may be weak, but collectively and in combination with other factors they are quite significant.

TABLE 12.5: The Impact of Rivalry Linkage on the Basic Rivalry Level

Variable	Estimate	S.E.	Significance
Intercept	67.56	6.23	.001
Ally	.49	.46	.30
Common foe	–4.03	2.82	.16
Contiguity	1.33	.77	.09
Common dispute	1.70	.81	.04

Note: Dependent variable: basic rivalry level.
Model *F*-value: 4.42.
Model significance: .001.
$R^2 = .27$.

The idea that rivalry conflict is more severe when it is linked through common dispute participation is consistent with findings in the traditional war literature that multilateral disputes and wars are often the most hostile and dangerous interactions. The effects of the other form of direct linkage, alliances, may be muted in the model because defense pacts and other such agreements might just as easily have a deterrent or mitigating effect on the escalation of conflict as they have an exacerbating one. Sharing a common foe actually has a negative effect on a BRL, although the negative parameter estimate is not statistically significant. This may occur because states, especially minor powers, have a limited "carrying capacity" to conduct rivalries. That they may face multiple rivals or are entangled in multiple rivalry relationships suggests that they exercise some prudence in allocating resources and attention to those rivalries. Thus, the only way they may conduct multiple rivalries at the same time is to limit the severity (and thereby the risk of war) for each of them.

The effects of linkage on the volatility of rivalries were similar to that for the BRL[7] and are reported in table 12.6. Again, around 20 percent of the variance in volatility is accounted for by rivalry linkage. Direct linkage is again significant, with sharing a common dispute increasing volatility. The inclusion of multiple actors in rivalry conflict may make that conflict unpredictable to the actors from dispute to dispute, and thus producing greater variation around the BRL. When rivalries intersect in a given dispute, there will be counter-pressures from high severity and low severity rivalries on each other, with the severity of a given dispute likely deviating from each rivalry's normal patterns. The other direct form of linkage, alliances, has the expected positive sign and is nearly statistically significant. Both the indirect linkages have negative coefficients, but do not approach statistical significance standards.

Beyond the focus mean severity and volatility in a rivalry, we are also concerned with the more traditional conflict patterns—war. Similar to the analyses

---

[7]As noted previously, although these are positively correlated, they are not dramatically so and are clearly separate conflict dimensions of a rivalry.

TABLE 12.6: The Impact of Rivalry Linkage on Volatility

Variable	Estimate	S.E.	Significance
Intercept	2,188	355	.001
Ally	43	26	.11
Common foe	−179	161	.27
Contiguity	−18	44	.68
Common dispute	120	46	.01

Note: Dependent variable: volatility of basic rivalry level.
Model *F*-value: 2.78.
Model significance: .04.
$R^2 = .19$.

with the basic rivalry level and its volatility, we ran a series of regressions seeking to predict the number of wars in a rivalry by reference to various forms of linkage; the results are also quite similar (see table 12.7).[8] The significance of the positive intercept indicates that enduring rivalries experience war even without any form of linkage, suggesting that linkage is not a necessary condition for the most severe form of conflict in a rivalry. Nevertheless, the four linkage variables account for over half of the variance in the number of rivalry wars, a far more powerful impact than was evident with respect to the BRL and volatility. Sharing disputes is again the most important form of linkage, although we repeat our earlier caveat about multicollinearity and the instability of parameter estimates. The greater volatility of some linked rivalries indicates that such deviations upward to war may be likely. Yet beyond making one's own conflict worse, war in one of the linked rivalries may trigger a similar event in the other rivalry, in many of the same ways as envisioned in the diffusion literature (e.g., joining an ongoing war); the expansion of the Austro-Hungarian war with Serbia to World War I is the classic example. Overall, rivalries are much more likely to experience war when they are linked in the same multilateral dispute, extending the findings of Vasquez (1993) and Midlarsky (1988), who pointed out the dangers of world wars emanating from linked multilateral competitions.

---

[8]The similarity may in part be because the basic rivalry level measure includes wars, which score the highest on the conflict level scale used to build the basic rivalry level. In addition, the regression technique assumes that it is possible to have negative values of the dependent variable (number of wars) , when in fact the lower limit of our cases is zero. Nevertheless, one might interpret such possible negative values as representing greater cooperation, and the use of the technique is essentially sound. Finally, linkage by common dispute includes some wars, and therefore one might argue that we get positive correlations because the same thing is on both sides of the equation; nevertheless, common dispute linkage was not found to be significantly associated with the frequency of war.

TABLE 12.7: The Impact of Rivalry Linkage on the Frequency of War

Variable	Estimate	S.E.	Significance
Intercept	.50	.24	.04
Ally	−.01	.02	.58
Common foe	−.16	.11	.14
Contiguity	.02	.03	.35
Common dispute	.20	.03	.001

Note: Dependent variable: number of wars in the rivalry.
Model *F*-value: 14.94. Model significance: .001.
$R^2 = .56$.

Conclusion

We hypothesized that when enduring rivalries become interconnected with one another, the potential for serious conflict and escalation increased. In effect, rivalry linkage could be a warning signal that international competitions could worsen and war was a strong likelihood. We initially discovered that enduring rivalries are more interconnected with one another than had been previously believed; all but one enduring rivalry studied was connected with at least one other rivalry. Such linkages were also not transitory. Most commonly, rivalries tended to link up with one another relatively early in their existence and did not become delinked until late in the competition. Indeed, many linkages lasted for the full life of the rivalry. This is consistent with the expectations of the punctuated equilibrium model of rivalries.

The impact of rivalry linkage on conflict was clear, although not always as uniform as we had expected. The basic rivalry levels of linked conflict were higher than those levels of unlinked conflict. The volatility of some linked enduring rivalries was also greater, although the results were slightly weaker. The findings were largely the same for the frequency of war as they were for the basic rivalry level and volatility, although the linkage variables accounted for significantly more of the variance there (more than half).

A number of other paths for future research are suggested by the work here. That all the enduring rivalries are linked with other rivalries in some fashion leads one to question the role of linkage in the formation of enduring rivalries. Do enduring rivalries reach their mature status, in part, because they are connected to other conflict? Might rivalries die out before reaching enduring status if they were not so intimately tied to other competitions? These are empirical questions that are suggested by our findings, but not confirmed in their own right.

The uncovering of rivalry linkages also has consequences for conflict management. First, it should be evident that rivalry linkage is an early warning indicator to policymakers that conflict between these two states could be severe

and that war is strongly probable. On the other hand, there may be little that decision makers can do about this interrelationship. Only alliances and patron-client linkages are directly manipulable by the rivalry participants, and the linkage is likely to take place very early in the competition (in the case of alliances and geographic proximity, the linkage preceded the onset of one of the rivalries in many cases). Consequently there may be little lead time and perhaps even less maneuvering room available to deal with the dangers of linkage. Furthermore, waiting for rivals to intersect in the same crisis is not frequent enough to be reliable and may occur too late in the process. Even if options are available, it may be hard to sever the linkage (alliances for example) once the rivalries have become intertwined. Overlapping and multiple connections between rivalries further complicate efforts at delinkage. When leaders can prevent linkages from occurring, however, as they successfully did in stopping Iraq from broadening the Persian Gulf War to include Israel, then the consequences can be beneficial.

If linkage cannot be easily prevented, the clear message nonetheless is that delinkage should be strongly pursued. The delinking of conflict was not always associated with a lessening of conflict, but more importantly was related to the termination phase of many enduring rivalries. This is illustrated by a number of different cases. The United States–USSR rivalry starts to decline in severity according to our measure in the mid-1960s, leading to détente in the 1970s (and this is consistent with most common perceptions). A common explanation gives pride of place to the conflict management lessons of the Cuban missile crisis, but we also note that at the same time the linkage between the United States–China and United States–USSR rivalries was dramatically loosening. Similarly, the Arab-Israeli conflict became less severe as individual rivalries gradually delinked from that integrated conflict. Jordan was perhaps the first to delink, not taking part in the 1973 war, but the most dramatic delinkage was when Egypt made peace with Israel. It is perhaps not surprising then that except for the 1982 Lebanese War (which arose under different circumstances) the Arab-Israeli conflict has avoided major war for almost 30 years.

Even if delinkage is not possible, conflict managers need to deal with conflicts in a multifaceted way. Because rivalries can influence the course of another competition, a strategy that focuses on only one dyad is bound to be problematic (although as the Egyptian-Israeli peace agreement illustrates, it is possible and may be a key to delinkage in some cases). Instead there must be recognition that efforts in one conflict can have spillover effects in another; this can be positive if conflict severity is reduced. It can also cause difficulties if the exacerbation of one rivalry sidetracks peace efforts in another rivalry. In the former Yugoslavia, there may be some benefits to achieving a peace agreement between two of the three main protagonists—Serbs, Muslims, and Croats. Yet a dyadic peace may be just as likely to be broken apart by continued fighting in the other, remaining dyad as a peace agreement would be to foster an agreement

between those two states. This represents a delicate balance and signals the desirability of a comprehensive peace strategy, although it is recognized that this may be more difficult and time consuming.

Finally, our perspective is quite different than that of Mearsheimer (1990), who mourned the end of the Cold War as the beginning of a new era of nationalist conflict. One notable aspect of the post–Cold War era is the apparent limited number of linkages between different conflicts. The war in Bosnia is not spreading because, in part, it has no connection to other European conflicts, quite in contrast to the pre–World War I powderkeg of rivalries linked through alliances (Sabrosky 1975). Certainly, there will still be cases of interstate conflict, and some of these conflicts are more probable now that the superpower rivalry is effectively over. Yet because of the absence of linkage, there is a better chance perhaps that they will not develop into enduring rivalries with their accompanying cycles of war and severe crises. Furthermore—and largely ignored by Mearsheimer and others—the end of the Cold War and the delinkage of its patron-client rivalries has led to some notable peace settlements in many long-standing external and internal conflicts. In these ways, it may be that while some structural realists will miss the Cold War, the world may enjoy some reduction in the number and severity of enduring rivalries.