(Enduring) Rivalries

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Introduction

Research on the democratic peace starts with a fact: democracies almost never fight wars with one another. Research on (enduring) rivalries begins with a contrasting observation: a small proportion of dyads accounts for a very large percentage of all militarized disputes and wars. A series of results (originally from Goertz and Diehl 1992a, and updated in Diehl and Goertz 2000) indicate that enduring rivalries (only 5.4 percent of all conflictual dyads and even less of all possible dyads) account for almost half of all militarized disputes and war over the past 200 years. Furthermore, enduring rivalries account for a disproportionate fraction of other important interactions including peaceful and violent territorial changes as well as low-level and violent international crises (Hensel 1998).[1]

These findings lead to the general hypothesis that these repeated conflicts between the same dyad are related to one another, and that explaining war requires understanding the relations between these disputes. Intuition supports this basic claim in many cases. For example, India and Pakistan have fought three wars in the last 50 years, with the outcomes of the first two wars arguably having a strong influence on the occurrence and timing of the war that followed. Similarly, Israel and the Arab states have clashed over the same pieces of territory four times since 1948; the Yom Kippur War in 1973 is one that most obviously traces its roots to the circumstances and outcome of the previous war. Even in those competitions that stopped short of war, as with the United States and the Soviet Union during the cold war, leaders relied on "lessons learned" from previous confrontations with the same enemy.

"Rivalry" broadly refers to repeated, militarized conflict between two states: rivalry is a relationship in which both sides deal with issues using the military tools of foreign policy. If such militarized relationships last

long enough, the rivalry becomes "enduring." Wars, crises, disputes, and conflict management all occur within the context of rivalry relationships. Sometimes issues are resolved early and the rivalry does not mature into the enduring phase. In other cases, early wars establish the tone, and repeated conflicts and wars keep the rivalry going. This explains our putting "enduring" in parentheses in our chapter title. Although most work has focused on enduring rivalries for a number of key issues, one needs a concept of rivalry that extends from the very short to the very long.

To look at war and militarized conflict in terms of rivalry represents a dramatic shift in theoretical and methodological perspective. Most of the theories and approaches surveyed in this volume use wars and disputes as the basic units of analysis, with the standard dependent variable being the dichotomous war–no war distinction. The analysis usually treats these data in a purely cross-sectional fashion. By putting these events into the rivalry context, scholars introduce a historical and longitudinal dimension into the analysis. The distinctiveness of the study of rivalries follows in many ways directly from these two key changes in standard practice: (1) taking rivalry as the focus of analysis and (2) taking into account the temporal existence of that focus. Instead of examining war with a pile of snapshots, the scholars of rivalries prefer to look at it as a series of short- to full-length movies.

Unlike many other research programs, the focus on rivalries is a relatively recent one and has only just begun to spread beyond a small set of scholars. Yet, even within its short life span, rivalry research has moved beyond a concern with definitional issues to more theoretical concerns. It has also evolved to consider more than simply *enduring* rivalries to those of all length and magnitude, an essential element in asking and answering questions about international conflict behavior. Rivalry research has also developed from exclusive use of rivalries as a background condition within the *causes-of-war* framework to form a central and new way of analyzing international conflict.

This review begins by tracing the conceptual and operational history of the rivalry concept. This is reflective of the early work on rivalries, but such concerns also provide the essential groundwork for empirical research. We then describe what has been called "the rivalry approach to war and peace," which is purported to constitute an alternative theoretical framework for understanding international conflict behavior. Finally, we summarize and integrate the extant empirical research on a wide range of concerns about rivalries, such as their origins, dynamics, and termination.

The Rivalry Concept

The term *rivalry* has formed part of the lexicon of international relations scholars, used casually by many to characterize feelings of enmity between states. Certainly it has attracted nowhere near the conceptual attention, for example, that "power" and "interdependence" have. Nevertheless, concepts similar to rivalry began appearing in the last 20 years, and in the past few years, several works have sought to define carefully the concept of rivalry, enduring rivalry in particular. In this section, we briefly review a number of those efforts (see also Hensel 1996a).

Early work considered the idea of "international enemies" (Feste 1982; Finlay, Holsti, and Fagan 1967), which signified states that exhibited overt or latent hostility that might lead to war. The enemies concept certainly conveyed the militarized element that is characteristic of many rivalry schemes and definitions, yet it provided little sense of the temporal length or degree that such hostility was felt, except to indicate with respect to the latter that war was recognized as a significant possibility. At the other extreme is the concept of "protracted conflict" (Azar, Jureidini, and McLaurin 1978; Brecher 1984; Starr 1999). Protracted conflicts referred to a long series of hostile interactions. Although this concept included the temporal element seemingly absent from the idea of "international enemies," it did not seem to differentiate between different degrees of hostility, potentially mixing protracted trade disputes with little prospect of war with dangerous military competitions that might experience multiple wars over a period of time. Ideas such as international enemies and protracted conflict were largely precursors to the recent attention given to enduring and other rivalries.

At its outset, the scholarly literature joined "rivalry" to "enduring." We suggested in the preceding that rivalries could be short as well as enduring; hence, the concept of an enduring rivalry is less important than that of a rivalry in general. Enduring rivalries do merit special attention, however, because they constitute a serious problem and an enhanced risk of war. The first mentions of the term *enduring rivalry* in the scholarly literature (Diehl 1985a; Gochman and Maoz 1984; Wayman 1982) did not generally include explicit discussions of the concept. Rather, the term was used to describe an empirical set of cases that was characterized by states clashing repeatedly in militarized disputes (Gochman and Maoz, 1984) over some short or long period of time. At the same time, Wayman, Diehl, and others developed operational definitions

of rivalry. Although largely a case of "putting the cart before the horse," rivalries did not receive serious and extended conceptual attention until a small critical mass of studies had been conducted. Thus, the concept of rivalry became a topic of interest sometime after various operational definitions were in existence. This odd state of affairs arose because initially those who used the idea were not interested in rivalries per se, but in using rivalries to investigate hypotheses about war and power transition, arms races, and so on (see later). Slowly it became clear that rivalries deserved attention in their own right, and the concept itself began to receive some sustained examination.

Rivalry in virtually all studies means *dyadic* rivalry. Goertz and Diehl (1993) call this criteria spatial consistency: rivalries include a consistent set of states in their domain. Given that most militarized conflict has thus far been dyadic (Jones, Bremer, and Singer 1996), one can anticipate that most rivalries will involve only two states. Nevertheless, it is possible that, by virtue of alliances, for example, more than two states might be involved in a rivalry. It is also possible that a multistate rivalry might overlap with a dyadic rivalry. France and Britain were jointly involved in a series of conflicts with the declining Ottoman Empire during the nineteenth century. One could also envision a rivalry involving more than two states arrayed in opposition to one another in a multilateral fashion.[2] That is, three major powers, for example, may in be in competition with each other over the same issues, but none may be aligned with another major power and each may have its own distinct set of preferences that are incompatible with those of the other two states. An example might be the United States, the Soviet Union, and China in the postwar era (Goldstein and Freeman 1991). Nevertheless, virtually without exception the rivalry literature has treated rivalry as a dyadic phenomenon.

Rivalry has also signified that nations use threats and military force to deal with their conflicts. Nations experience all kinds of conflicts, but only some are conducted regularly with the military tools of foreign policy. Rivalry signifies a hostile relationship, in which the competition is conducted militarily. Thus, most conceptual definitions include some type of militarized component, and as noted later, operational definitions focus on repeated militarized actions. Hensel (1996a) stresses the need for both competition and threat perception. The first component, competition, is almost self-explanatory in that there must be some disagreement over the division of some good, and the assumption seems to be that such competition cannot result in a fully positive sum outcome.

Yet Hensel notes that his focus on militarized interstate rivalries requires the second component, namely that states believe that their rival threatens national security interests. Threat perception then distinguishes a wide variety of competitions (e.g., some trade disputes) from hostile disputes involving the potential use of military force. Goertz and Diehl (1993; Diehl and Goertz 2000) make a similar argument in requiring that rivalries have a competitive element. Having conflicting goals does not necessarily mean that preferences of the competitors are irreconcilable or that the competition is entirely zero-sum (although this may be the case in some rivalries). These goods may be intangible, such as political influence (as in "power politics" conceptions) or ideological/religious dominance. The competition may also be over more tangible goods such as natural resources or territory. In practice, it is likely that individual rivalries reflect varying mixes of these sources of competition.

Rivalries are not just a history of conflict, however, but also the expectation of future conflict. The first dispute or war between a pair of states potentially begins a long-term rivalry. One distinguishing characteristic of rivalries is that the participants anticipate military conflict against each other in the future. They may not know exactly when or where it will occur, but they believe it to be likely and plan for it by acquiring arms, alliances, and the like. Thus, a rivalry relationship consists of a past and a future, and both may be crucial in understanding how rivalries get started and how they are maintained over time (Goertz and Diehl 1993, 1995a).

One can call the approach that relies only on the expectation of future military conflict, and operationally looks only at manifestations of rivalry in terms of disputes and wars, as the "behavioralist" view of rivalry. In this approach, all that matters is that nations use the military tools of foreign policy in the conduct of the rivalry and expect to do so in the future. The commonality is not the issue in contention, but the means of dealing with some issues. By focusing only on the tools of foreign policy, the behavioralist approach may connect unrelated disputes. For example, some lists of rivalries include one between the Britain and Brazil in the mid–nineteenth century. Some of these disputes involved the slave trade, and others concerned territorial issues regarding British colonies, as well as additional issues. Do all these conflicts constitute a single rivalry? According to the behavioral approach they do, because Britain dealt consistently with Brazil using military force and vice versa.

In contrast, a number of students of rivalry have argued that in addition to military means one needs to consider the issues over which rivals fight. What characterizes a rivalry relationship is that military force is used *and* that the rivalry is over one issue or set of issues. Issue consistency over time thus permits one to say that all the competitions in the rivalry belong to the "same" relationship. The advantage of issue conceptions is that it makes one more certain that the various incidents in a rivalry really belong together as part of same relationship. Because the issue remains constant one can link the various disputes of a rivalry.

Bennett (1993) is indicative of this mixed model (behavior and issues) view of rivalries. He conceptualizes enduring rivals as those states that have disagreed over the same issue for an extended period of time. Rather than simply minor disputes or those between allies, Bennett also stipulates that the rivals must have devoted significant resources (military, economic, etc.) to the rivalry, and his operational definition suggests that a willingness (and acting on that willingness) to use or threaten military force against one's rival is also an essential part of the rivalry relationship. Vasquez (1993) claims that states define rivals in terms of what gaining or losing stakes will mean for one's competitors; thus, the concern in rivalries is with relative, rather than exclusively absolute, gains and losses.

The issue dimension raises the question about whether the source of the dispute is necessarily consistent over the life of the rivalry. States may fight over essentially the same issues during a rivalry (e.g., the Arab-Israeli conflict since 1948). Yet, it is also plausible to conceive of a rivalry in which there is some variance in the issues (e.g., Britain and France in the eighteenth century). States may compete over a series of goods and the confrontations may vary according to which goods at the time are in dispute. Rather than talk about issues in dispute, Diehl and Goertz (2000) use the concept of "the expectation of a continued conflict relationship." This expectation can arise in different fashions, some of which fall under the intuitive idea of issue. Unresolved territorial claims are an issue that can produce such expectations, but so too can a history of mistrust and struggle between two states. It can be the case that there are different sources of competition leading to the same rivalry effect, much as different foreign policy choices can produce the same outcome (see idea of "substitutability" in Most and Starr 1989). Nevertheless, adding the issue component can have significant practical effects. This appears most clearly in the case of "interrupted rivalries" (Goertz and Diehl 1993). The

pure behavioralist takes a rivalry to have ended operationally after a certain number of nondispute years. By including issue criteria the rivalry can remain alive through long periods of no overt conflict.

Unfortunately, we have no pure issue-based conceptions of or data on enduring and other rivalries. All current work (even that from the mixed view) starts with purely behavioral criteria (as noted later, in practice this means the presence of militarized disputes) and then moves to issue aspects. Yet there may be important conflicts that do not manifest themselves with overt military threats or behaviors, or do so only irregularly over long periods of time. Which of these cases deserve to be included in an issue-based list of rivalries? Thus far the scholarly literature has not addressed this or related questions from an issue-based approach.

The previous attempts at conceptualizing rivalry have been heavily influenced by a research focus on enduring rivalries and more subtly by the operational definitions of rivalry that rely on the occurrence of militarized disputes. Thompson (1995b) complains that the enduring aspect of enduring rivalry has been overemphasized at the expense of the rivalry aspect. Accordingly, he sees most conceptual and operational definitions as overly broad. In his view, a state's rival is more than simply an external threat or continuing source of problems for that state. In place of the typical notion of enduring rivalries, Thompson advocates the adoption of the term *principal rivalries*. Thompson distinguishes competitions that represent some threat to security from those that are primary and fundamental (see also McGinnis and Williams 1989). Thompson, agreeing with Kuenne (1989), rejects the notion that rivalries are mere competitions. Unlike most market competitions, for example, rivalries exhibit nonanonymity in that the competition is focused directly on one competitor. Some level of endurance is implicit in Thompson's idea of principal rivalry, but continuity seems to be a more major concern.

Types of Rivalries

Beyond the general conceptions of rivalries, scholars have sought to differentiate different types of rivalries, with the implicit assumption that different types exhibit different behavioral patterns. Hensel (1996a) suggests the possibilities that rivalries can be nonmilitarized and that rivalries do not have to involve nation-states. Although these remain interesting possibilities, the empirical literature has focused almost exclusively on militarized rivalries between states (in part for reasons of data availability).

The common differentiation among types of rivalries is based on their length. Hensel (1996a) as well as Goertz and Diehl (1993; Diehl and Goertz 2000) introduce a temporal dimension to their conceptions of rivalry: it must last long enough to focus each state/rival's attention on the other. On this dimension, rivalry types vary according to their length, ranging from brief competitions to those that extend over many years, the latter of which are labeled as "enduring." For a rivalry to be enduring, one might suggest that it last longer than a brief period, although the exact time frame has been more a matter for empirical measurement than of conceptual clarity. Goertz and Diehl divide the continuum of rivalry into several parts (Goertz and Diehl 1992a). Isolated rivalries are those of very brief duration, sometimes representing very severe conflict, but whose bases of conflict are resolved in a short period or wither away such that recurring conflict and war are no longer central concerns in the relationship. Enduring rivalries are the longest of the rivalries and have the greatest expectations of an ongoing conflictual relationship. The impact of history in those relationships is also greater given there is more history to affect the relationship. One might think of enduring rivalries as lasting elements in international affairs. Proto-rivalries represent something of a middle ground between the isolated and enduring kind; they persist for a moderate amount of time, but the history of hostility has less of an effect than in enduring rivalries, but more so than in isolated competitions. Indeed, protorivalries can be thought of as potential enduring rivalries that terminate in adolescence before they reach that maturity, whereas isolated rivalries undergo something akin to crib death.

Thompson's (1955) more narrow focus on principal rivalries should not imply that he regards all these as the same. He classifies rivalries according to two dimensions: (1) the type of competition and (2) the locale or scope of that competition. With respect to competition type, he distinguishes spatial rivalries from positional ones. Spatial rivalries are those that are fought over territorial control and tend to be less intense than their positional counterparts. Spatial rivalries are likely to involve minor power states and even involve states with asymmetrical capabilities, although such a condition is thought to make such rivalries end more quickly. In contrast, and more interesting from Thompson's theoretical perspective, are positional rivalries, which are competitions over relative positions in a power hierarchy. These are essentially regional or global power struggles that inherently assume some capability symmetry (a competition over power and influence is unlikely if one state is dramatically stronger than another).

The second dimension, location, indicates where the rivalry is contested, and there are four possibilities: (1) dyadic, (2) regional, (3) global, and (4) regional-global. Dyadic rivalries are competitions confined to a narrow geographic area, and these rivalries are thought to be primarily of the spatial variety. Regional rivalries concentrate on slightly broader areas and are competitions over power in a more defined region, such as the rivalry between Spain and France in the sixteenth century. Global rivalries, such as between Venice and Portugal in the fifteenth century or the United States and the Soviet Union in the twentieth century, are those international competitions for leadership, consistent with the framework of the long cycles literature (Modelski 1987; Modelski and Thompson 1989). The final category combines the previous two and is illustrated by the Netherlands' rivalries with Spain and France in the sixteenth and seventeenth centuries, respectively.

Some scholars argue that militarized competition and therefore rivalries must involve states that can realistically challenge the security positions of each other; in effect, only rivalries between states of approximately equal capabilities are of theoretical interest—major power or minor power rivalries. Mixed major-minor rivalries are thought to have different behavior characteristics (Vasquez 1993). Those who contend that the key rivalries are those conducted between approximate equals believe that a preponderant state does not have to compete with a weaker foe because there is little chance that the weaker state will prevail in the competition.

It may be incorrect to assume that the power distribution necessarily remains constant throughout the rivalry. Furthermore, a rivalry does not end or suddenly begin merely because one side has dramatically increased its strength. Similarly, declaring a series of hostile interactions as a rivalry only after approximate parity is achieved may ignore the roots of the competition and the reason for the shift from preponderance to parity (e.g., the power transition model). Major-minor power rivalries may exhibit different characteristics than other rivalry types, but this is a theoretical and empirical question. It may be best at this juncture not to exclude, a priori, any type of protracted hostile interaction from consideration as a rivalry. Most operational definitions of enduring rivalries include a significant number of major-minor power rivalries, and an important topic of empirical study is how such rivalries differ in behavior as compared with symmetrical rivalries.

Overall, although there is some diversity of approach in conceptualizations of rivalry, there is some consensus that enduring rivalries are those that involve the same set of states clashing in repeated militarized confrontations over a(n) (extended) period of time.[3] In addition, issue criteria may be introduced to prove more links between conflicts. Not surprisingly, the operational definitions of enduring rivalries focus on these elements. Most start with a preliminary list of rivalries generated on purely behavioral criteria, then issue aspects come into play, particularly in determining start and end dates.

Operational Definitions

There has been one attempt to define rivalries of all varieties (Diehl and Goertz 2000; Goertz and Diehl 1992a), but there have been several systematic attempts to develop a population of only enduring rivalries. This is not to say that scholars have not studied rivalries or conflict phenomena that can be labeled as rivalries. The dominant method in defining enduring rivalries has been to use historical judgment. In most of these efforts, a universe of cases is not the goal. These are historical case studies in which no attempt is made to generalize beyond the limited domain of the study. Some cases, such as the Anglo-German conflict at the beginning of the twentieth century or the U.S.-Soviet conflict after World War II, are consistent with conventional wisdom on what constitutes an enduring rivalry. For example, Lieberman (1995) is interested in the Arab-Israeli rivalry, and it is relatively easy to discern the independence of Israel as the event signaling the onset of the rivalry and several wars serving as signposts along the way. In other cases, the particular theoretical questions posed by the researcher inexorably lead to the identification of certain rivalries for study. For example, Kinsella (1995) sought to understand the effects of superpower competition and arms transfers on third world conflict; obviously, he focuses on the U.S.-Soviet rivalry and on four other enduring rivalries (drawn from Huth and Russett 1993) that involve superpower client states. Yet these methods do not result in systematic criteria to develop a universe of cases.

Three main issues dominate all operationalizations of the rivalry concept. All the rivalries must have a beginning and an end. Hence one must develop means for determining the birth and death dates of rivalries. The

third issue revolves around establishing the criterion for *enduring* rivalries. How long does it have to last before it becomes enduring?

The Correlates of War (COW) project and its associates have generated most of the operational measures of enduring rivalries. Each of these related efforts share a number of characteristics and empirically produce similar lists of enduring rivalries. Despite the similarities in construction and output, there are minor differences in the definitions; and it is unlikely that there will be one uniform COW definition of enduring rivalries as is the case for militarized disputes (Jones, Bremer, and Singer 1996), for example. Although not identical, the differences between the definitions are relatively minor, usually dealing with auxiliary conditions. We divide these definitional efforts into the first generation, which was mainly concerned with using rivalries to test other hypotheses, and the second generation, which focused on rivalries themselves.

Because most operationalizations have come from the COW Project, not surprisingly most have relied on the COW list of militarized interstate disputes (see Gochman and Maoz 1984 and Jones, Bremer, and Singer 1996) to identify enduring rivalries. Each effort has established some threshold for the frequency of such disputes involving the same pair of states over a given time frame to distinguish short-term conflict from an enduring rivalry. The beginning of the rivalry corresponds roughly to the beginning of the first dispute and termination to the end of the last conflict.

The first generation of definitions used purely behavioral criteria in the form of dispute occurrence. Rivalries began with the first dispute and continued as long as there were disputes, assuming that the interdispute waiting time was not too long. Rivalries terminated sometime in the period after the last dispute, often arbitrarily fixed at 10 to 15 years. For example, Wayman (1982, 1996) designated a dyadic enduring rivalry as any instance in which two states oppose each other in two or more disputes within a 10-year period. He assumes that a militarized dispute has a decade-long impact on a dyadic relationship. If that hostile relationship is reinforced by another dispute, then the two states have extended their hostility and can be considered to be in an enduring rivalry. Thus, a rivalry lasts from the onset of the first dispute until 10 years after the last dispute.

Diehl (1985a, 1985b, 1985c, 1994; Diehl and Kingston 1987) basically extended and refined Wayman's definition, making an enduring rivalry as any situation in which two nations engage in at least three militarized disputes within a period of 15 years. Diehl argues that once established,

enduring rivalries need a lesser frequency of dispute occurrence for their maintenance; the competition cannot be considered fully dissipated until the relationship experiences a significant period without military confrontation. Accordingly, the time frame for a given enduring rivalry is extended if a militarized dispute between the rivals occurs within 10 years of the last dispute in the original rivalry sequence. Therefore, there must be a 10-year "dispute-free" interval before a rivalry can be certified as ended. This definition specifically excludes disputes related to ongoing world wars, so as not to confuse their effects with those of the enduring rivalry. Diehl's criteria are more specific than Wayman's, and there is greater sensitivity to the termination as well as the onset of rivalries.

Gochman and Maoz (1984) construct a list of enduring rivalry dyads that include major power, minor power, and mixed types. Their operational criteria, however, are somewhat vague. They consider enduring rivalries as "the pairs . . . of states that most often have engaged in disputes with one another" (1984, 609). In practice, this turns out to be a minimum of seven militarized disputes over the 1816–1980 period. There appears to be no temporal component, as disputes may be years apart and involve wholly unconnected issues; the only things they have in common are the participants.

The second generation of definitions (e.g., Bennett 1996; Diehl and Goertz 2000; Geller 1993; Goertz and Diehl 1992a; Huth, Bennett, and Gelpi, 1992; Huth and Russett 1993; Jones 1989; Maoz and Mor 1996; Wayman and Jones 1991), starting in the late 1980s, took the basic behavioral framework from the first generation, but added more conditions and extended the minimum duration for an enduring rivalry. Here too we see for the first time the inclusion of issue criteria in some definitional schemes. These operationalizations now require an enduring rivalry to contain a minimum of five to seven militarized disputes involving the same two states, and almost all require that there be at least 20 or 25 years between the outbreak of the first dispute and the termination of the last dispute. For any two disputes to be part of the same rivalry, there must be a period of no more than 10 to 15 years between the disputes, or in some conceptions the issues over which the disputes revolve must be the same and unresolved. This is designed to meet the notion that states must consistently be challenging one another either through frequency of conflict within a narrow time frame or over the same issue across a broader time frame.

In addition to these major requirements, some schemes add some additional, minor conditions. In one variation, each dispute must last at least 30 days and include reciprocal threats, displays, or uses of military force (e.g., Jones 1989; Maoz and Mor 1996). The reciprocity requirement is designed to eliminate confrontations in which the use or threat of force did not prompt a reaction from the other party; this ensures that the disputes represent actual competition and hostility by both sides. The duration requirement (about the median for disputes involving the display of force) is apparently designed to eliminate single incidents being classified as rivalry producing disputes. This adds a temporal requirement for the disputes as well as the rivalry as a whole. In addition, several of the individual definitions in the COW group stipulate that the two rivals must be the primary initiator and primary target of the dispute, respectively, or there needs to be direct and prolonged military confrontation between the rivals in a multiparty dispute in which they were not the primary parties. This is designed to eliminate third-party interventions in which one rival is not in direct confrontation with the other.

Looking at militarized disputes is not the only way to generate a list of rivalries, enduring or otherwise. For example, one could clearly use events data in a similar fashion (Hensel 1997). It is the case, however, that no other method or data has been used to develop a universe of cases. Thompson (1995b) perhaps comes the closest in trying to identify a list of principal rivalries; yet he admits that he only presents the "primary" ones over the last five centuries ($N = 12$) and this is largely based on the "long cycles" research framework. It is unclear from his article how one might operationally identify other principal rivalries, although the conceptual scheme seems amenable to operationalization.

All definitions use the same basic data set (various versions of the COW project militarized dispute data set) and rely on the frequency of militarized disputes to identify enduring rivalries. On the one hand, each definition is open to the criticism that militarized disputes are only one manifestation of an enduring rivalry (Thompson 1995b). Yet militarized disputes are a better indicator than arms races and the like because they are better able to meet the conceptual standard for militarized competitiveness, that the use of military force or resort to war is an ever-present danger.

Nevertheless, militarized disputes are not without their problems. All the definitions will pick up on militarized dispute activity only as it reaches above a certain threshold (the threat of military force). In statis-

tical terms, the data may be "truncated" from below, and the beginning and/or the end of conflict in the rivalry may be missed. One aspect of the minor requirements of some COW definitions is to raise the minimum observation level for rivalry. Requirements about reciprocity, duration, and multilateral disputes means that the truncation line is moved upward, which increases the risk of missing a rivalry. This may not be desirable as it reduces the information we have about the rivalry relationship. Truncation from below with dispute data already sets serious observational limits, which these additional conditions exacerbate.

Between the two generations we can see a clear tightening of standards in the operationalization of enduring rivalry. From the first to the second generation, the number of disputes to qualify as an enduring rivalry increases from 2–3 to 5–6 and the duration from 10–15 to 20–25 years. Wayman required only that two disputes occur to establish an enduring rivalry. The other definitions require a varying number of disputes, in part dependent on the time frame established for the rivalry. For example, Diehl sets three disputes for the minimum, but this averages to about one every five years (the same as the Wayman requirement for two disputes in a 10-year period and some of the COW group who look for five disputes in a 25-year time frame), whereas the Gochman and Maoz requirement of seven disputes (the highest among definitions) translates only to one every 23 years over the 1816–1980 period, and there may be little connection between those disputes. Although a serious military threat may be a potentially justifiable minimum level of militarized competitiveness, how long "enduring" should be is not clear. We know of no theoretical arguments for the 20–25 year minimum, but there is an empirical argument for that as a natural breakpoint in the distribution of rivalries. Diehl and Goertz (2000) used the empirical distribution of *all* rivalries according to their lengths and the number of disputes to arrive at their 20-year and six-dispute standards for enduring rivalries. They found significant empirical breaks around those particular points.

Determining the beginning and end points is a crucial aspect of rivalry operationalization, because many important hypotheses focus on these key events. It is often easier to see a rivalry begin, because of a clear set of events, than to understand when it is over. Few definitions really provide termination criteria distinct from those related to the maximum time between disputes. The end of the rivalry occurs sometime after the last dispute. Most definitions do not specify a precise date of termination, only that it occurs sometime between the end of the last

dispute and some fixed time thereafter, usually designated as 10 years. The problem with this is that although states might resolve their major differences through war and/or international agreement, operational definitions will not recognize the end of rivalry until at least 10 years after the last dispute. This means that most approaches will only be able to pick up hostile actions and must await the passage of time to make an ex post facto judgment on termination. This is most evident in the recent demise of the cold war, which according to the definitions here may not end until the beginning of the twenty-first century. The use of the COW dispute data set thus implies that all the definitions will have problems accurately determining the exact beginning and end points of rivalries. All definitions consider that a rivalry may continue at least 10 years after the last dispute, but similar consideration suggests that a rivalry could begin 10 years prior to the first dispute (a consideration that all current definitions ignore).

An exception to the reliance on vague or arbitrary post-last-dispute rules for termination points is Bennett (1993, 1996, 1997a, 1997b, 1998). Because he is interested in rivalry termination, he adopts additional and specific criteria for rivalry termination. More than just a cessation of military hostilities, Bennett requires that the issues under dispute also be resolved. This is indicated by the signing of a formal agreement or a public renunciation of claims by the rivals. The choice of criteria for rivalry termination can have a significant effect on pinpointing the end of rivalry and influence the conclusions drawn from empirical analyses about rivalry termination. Bennett (1997c) compared the effect of detecting rivalry termination through (1) the absence of militarized conflict for a sustained period of time versus (2) the timing of the resolution of the issues under contention. He reports that there can be, in some cases, a 25-year difference in determining when a rivalry is over.

For both beginning and end dates, however, it may be unrealistic to try to pinpoint an exact date. Both the beginning and end of rivalries can be drawn out, and we only know post hoc if the rivalry has begun or ended. To determine exact dates is akin to asking when someone was cured of cancer. One only really knows after a certain period of time with no symptoms, and a recurrence becomes less and less likely only after the passage of time. In such cases, one cannot say that the cancer was cured in any particular year. In short, beginning and end dates are important but difficult to observe with exactitude. Formal agreements may apparently signal the end of a rivalry, but later events may prove otherwise.

Nevertheless, one should not exaggerate the problems with post hoc judgments. Viewing things post hoc does not mean that the coding decisions are wrong, but that we only really know post hoc. We may only know that cancer surgery really succeeds some time after it is all over.

The exact number of rivalries identified varies among the COW group according to which definition is adopted and which version of the militarized dispute data is used. Typical of those using the latest available data, Diehl and Goertz (2000) have identified 63 enduring rivalries. The operational measures discussed earlier have all focused on enduring rivalries. Yet for some applications, it is important to include rivalries of all durations. Thus far only Diehl and Goertz have proposed a conceptualization and operationalization of rivalries that runs from the very short, isolated conflicts, to medium-term protorivalries, to enduring rivalries. They use the basic COW behavioral framework already described to construct rivalries using *all* of the militarized dispute data. The shortest rivalry consists of just one dispute; two disputes within 10 years is the next shortest, and so forth. With this procedure and using the MID 2.10 data (militarized dispute data described in Jones, Bremer, and Singer 1996), they identified 223 proto and 880 isolated dyadic rivalries among the 2,000 militarized disputes over the 1816–1992 period (in addition to the 63 enduring rivalries). The utility of these rivalries of different lengths is most apparent in applications of the rivalry approach to war and peace.

The Rivalry Approach to War and Peace

Much of the early enduring rivalry research focused on operational definitions. This was largely because scholars were concerned with identifying those cases that they could analyze in pursuit of studying deterrence, power transitions, and other phenomena. Later research, much of it reviewed in the following, centers on rivalries as central foci in and of themselves. Yet rivalries are not merely a new topic of research—an extension of the logic behind studying "dangerous dyads" (Bremer 1992)—nor are they merely a useful research tool and case selection device. Goertz and Diehl (1995a; Diehl and Goertz 2000) propose that the rivalry approach constitutes a general framework for examining many issues and hypotheses in the conflict literature; it is not just another hypothesis to be added to an already long list, but rather is more like

Most and Starr's (1989) "opportunity and willingness" framework for the study of international conflict. The rivalry approach raises new questions, including new twists on old hypotheses, particularly about the relationship of war to peace. The rivalry approach also suggests some alterations in the typical methodology used to test hypotheses about international conflict. Here, we provide an overview of the rivalry framework, as it increasingly guides the work on (enduring) rivalries and how it relates to common causes-of-war hypotheses.

The rivalry approach focuses attention on issues normally beyond the horizon of the traditional international conflict literature, or what might generically be labeled the causes-of-war approach, in three general ways. The first of these is perhaps the most fundamental because it removes war from center stage. In virtually all analyses of conflict, war is the variable to be explained. In the rivalry approach, the rivalry relationship takes over as the fundamental object of study. This explains our extensive discussion of rivalry and its operationalization. Here we explore some of the methodological and theoretical implications of that concept. The next three sections illustrate how the rivalry approach generates new hypotheses as well as creates new methods to test classic hypotheses.

Changing Foci of Analysis: From War to Rivalry

Research using the traditional causes-of-war framework tries to explain war as the result of certain hypothesized causes typically including events, interactions, or conditions, with some examples being military expenditure patterns, crisis bargaining, or political regime types. Scholars in this tradition search for the presence of the hypothesized causes shortly before or coterminous with the outbreak of war in a set of cases as well as in control groups in which no war occurs. Transferring these sorts of explanatory models into the rivalry framework replaces war with rivalry; one looks for the presence or occurrence of hypothesized events or conditions before the rivalry starts and just before it ends. The former could be called the "causes-of-rivalry" hypotheses and the latter could be called the "causes-of-peace" ones.

Although the causes-of-war literature provides many useful ideas for understanding the causes of rivalry, the causes of peace prove more problematic. The problem with peace is that it has been conceptualized as "not war." How does one explain a nonevent? With rivalry as the unit of analysis, there is a potential event to analyze: the death of the rivalry.

Because of the temporal duration of a rivalry, there are two equally important questions: why rivalry starts and why it ends. An example of the latter application is found in Gibler (1997a), who looks not at how territorial settlement treaties end war, but rather rivalries.

Changing the unit of analysis also expands the horizon of international conflict scholars. They become concerned with the outbreak of peace as well as war, with peace defined as the end of the rivalry relationship rather than simply the end or absence of war. Thus, those who adopt the rivalry approach are able to explore conflict management and resolution, and they do not merely lump all aspects of the absence of a shooting war together. International conflict scholars have long been criticized for their exclusive focus on war, with the accompanying ignorance of cooperative and lower-level conflictual relationships. The rivalry approach addresses this critique, in part, by putting conflict resolution (not just war termination) on the research agenda and by providing some concern for the stability of peace achievements (as the rivalry approach is also concerned with how rivalries begin).

Many of the hypotheses about the causes of war are relevant to explaining the occurrence and severity of rivalries. For example, there has been a debate in the literature over the past several decades about the relative war proneness of bipolar and multipolar systems. By turning our attention away from war to rivalries, fresh questions can be raised and some old controversies addressed. Do certain system structures produce more rivalries that are of greater severity (even short of war) and of longer duration? (Multipolar systems and their allegedly greater fluidity should produce shorter and more numerous rivalries, whereas bipolar systems should produce fewer and more enduring rivalries according to the prevailing logics of each argument.) If major power war is generally avoided in a given system, does this beneficial effect also extend to conflict resolution between the major actors? How does system change affect the conduct of ongoing rivalries? Each of these questions has the potential to provide new insights into old debates as well as to offer some new bases for understanding the impact of system structure on state behavior.

Among the ways the rivalry approach permits a new evaluation of old hypotheses is the simple replacement of dispute by rivalry as the (statistical) unit of analysis. Vasquez (1996) illustrates this by taking his "steps-to-war" framework and testing it using rivalries. In each of his analyses, a rivalry counts as a single case. Gibler (1997a) shows that one can use both rivalry and dispute as the unit of analysis. Although these

do not constitute fully independent tests (both rely on COW dispute data), they do examine the robustness of the theory.

Many studies that use rivalries take the cross-sectional time-series approach. Huth and Russett's (1993) work on deterrence provides a good example of this. But one should and can add analyses with rivalry as the focus of analysis. Huth and Russett evaluate their models only in terms of disputes, but they could also see how well it performs at the rivalry level. It may be that such models work well or poorly for certain rivalries, information that does not appear by lumping all the disputes together. A complete rivalry analysis normally should include *both* kinds of statistical tests, dispute and rivalry, as the input to statistical tests. There are a few examples of this in the literature: Gibler (1997a) and Goertz and Diehl (1995b) actually perform both kinds of tests. The general tendency is to privilege the cross-sectional time-series to the detriment of cross sections between individual rivalries.[4]

Longitudinal and Dynamic Implications

Treating rivalry as the focus of analysis generates many new hypotheses and is particularly appropriate when trying to understand the initiation and termination of rivalries. Yet the core of the rivalry approach also stresses the longitudinal and dynamic character of the rivalry relationship; it is an interaction that exists over time. Another series of questions thus arises about the dynamics of rivalries. Certain kinds of expectations are central to understanding rivalries. An enduring rivalry is a hostile and competitive relationship in which each side views the other as posing a significant threat to its own interests. In such a relationship, rivals expect that disputes, crises, and even war will continue into the future. These expectations condition current foreign policy choices, which may then provide feedback to help cause future war (the positive feedback of an arms race model), or prevent it (the negative feedback of deterrence models). Static models based on national attributes or current conditions will not capture this long-range outlook.

If future expectations are significant in rivalries, one might ask where they come from. One obvious response is past interactions. Rivalries have a joint history in addition to a joint future. The concept of "learning" has received a great deal of attention in recent years. In his literature review, Levy (1994b) recommends that one examine learning in the context of one crisis. Yet the rivalry approach argues that learning models can neither

be conceptualized nor studied except in a dynamic, longitudinal fashion. If a state has really learned something, then that learning will be evident on many future occasions. If such evidence is not forthcoming, doubt is cast on whether any real learning from the past took place. If it is a trial-and-error or search process, then we can only see that over multiple trials. The rivalry approach provides a framework for examining different models of state learning. An illustration is offered by Maoz and Mor (1998) who attempted to uncover whether certain states in the Middle East exhibited learning in repeated interactions. They find that some adaptive learning does occur within rivalries, but their model is often incorrect in predicting the behavior of the rivals. They cite perceptual shifts about what game is thought to be in play and incomplete information about the process by scholars as possibly responsible for this discrepancy. In any case, there appears to be less learning and its subsequent impact than one might expect, although such processes are often hard to identify and assess (see Levy 1994b).

Another longitudinal aspect of the rivalry approach is a broader consideration beyond a given end point—war. The causes-of-war approach postulates a series of events or states of affairs occurring before war as potential explanations of war. In the rivalry approach, war most often occurs somewhere at the beginning or middle of the rivalry. Hence, scholars are naturally concerned with what happened before the war in the rivalry, but just as often we are concerned with what happens after wars. In a symmetrical fashion, many of the phenomena that occur before a war can take place following it. That is, many of the causes of war can also be the effects of war. For example, does war result in a power transition? in an arms race? in a regime change?

Another focus of the rivalry approach is the dynamics of rivalry evolution. Here the move is away from juxtaposing the rivalry approach with important hypotheses in the war literature. Although the causes-of-war literature can provide us with many hints and suggestive ideas, it cannot respond to the question of the evolution of conflictual relationships. Most of the dynamic hypotheses in the war literature involve escalatory processes, but rivalries escalate and de-escalate (Goertz and Regan 1997); there are periods of calm in addition to the storms that occasionally shake the relationship. We need theories that relate periods of calm to periods of crisis; we need to know if and when crisis, dispute, and war affect the basic parameters of the relationship and when they do not. These are questions that only make sense within the rivalry approach.

The literature on the dynamics of particular rivalries (e.g., Goldstein and Freeman 1991; McGinnis and Williams 1989) offers a useful place to begin. For example, if in rivalries we find that periods of calm are associated with democratic regimes (or democratization) and that periods of greater conflict tend to occur when this is not the case, then this provides direct evidence for the democratic peace hypothesis. Most of the process theories in international relations tend to describe such processes before war, but few connect wars and disputes with each other.

Methodologically, the longitudinal component of rivalries creates new possibilities for testing standard hypotheses and resolving some long-standing problems with previous cross-sectional tests. We would like to mention two possibilities that prove exceptionally useful; one uses rivalries in interrupted time-series analysis, while the other uses nondispute rivalry years as a control group. Huth and Russett's (1993) work on deterrence demonstrates the usefulness of the control group application. Case selection has provoked great debate in the deterrence literature (Achen and Snidal 1989). The problem revolves around finding cases of deterrence success, as deterrence failure is fairly easy to detect. Huth and Russett (1993) solve this problem by considering the nondispute/war years of a rivalry as deterrence successes. Because (enduring) rivalries have both dispute and nondispute periods, they provide a natural set of treatment and control periods. Lieberman (1994) uses the same basic strategy in critiquing Lebow and Stein (1990). He argues that many of the factors they associate with Middle East wars occurred as frequently during nonwar years. Hence there is no significant correlation between these factors and war. In short, one can compare different periods of a rivalry to evaluate various hypotheses.

The interrupted time-series method is a special application of this same idea. Scholars can compare rivalries before and after some critical event to determine the impact of that event on the occurrence of disputes and wars. A particularly interesting application of this methodology investigates the democratic peace hypothesis. One could examine the evolution of a rivalry before or after it makes a transition to or from the joint democratic status. If the democratic peace hypothesis is correct, we would expect to see the rivalry end, or at least a clear reduction in the severity level. Hensel, Goertz, and Diehl (forthcoming) found that militarized disputes were generally much less likely during periods of joint democracy as compared with other periods; the exception is that regime-change dyads that evolved into enduring rivalries continued with their

patterns of disputations behavior regardless of the regime types of the rivals. Among rivalries that are transformed to joint democratic status, however, the conflict level tends to be lower when there is a democratic dyad, and the rivalry almost always ends shortly thereafter. Consistent with these findings, Bennett (1997a) finds that joint democracy helps to end a rivalry.

The interrupted time-series technique avoids many of the problems of the standard cross-sectional procedures. One need not define relevant dyads, one need not worry about how to code multiple-year wars, and there is no need to decide about what time frames to use as the basic period of analysis. We do not think that interrupted time-series and control group methodologies exhaust the richness of the longitudinal dimension of rivalry for testing purposes. We suspect that as scholars take the rivalry as a basic unit of analysis more seriously new applications will emerge.

Rivalries as a Contextual Factor

In the previous two subsections we have exposed the methodology and testing possibilities that the rivalry approach creates, but which have been underexploited. Here we start by considering the first major use of rivalries: as a testing and case selection mechanism. We label this use of rivalries as the contextual or background condition. The kinds of questions posed in the background condition literature are quite different from those posed in the rivalry approach. As a background condition, rivalries are only used in an instrumental capacity; they are a case selection mechanism in the research design. The longitudinal component is absent, and often the data analysis consists of purely cross-sectional techniques. Many theories, such as those concerning arms races and power transition, require a condition of underlying hostility or competition. (Enduring) rivalries provide a means of identifying ongoing and prolonged serious conflict between a set of states. Looking at enduring rivalries allows the scholar more valid conclusions than consideration of all dyads or all contiguous dyads (many of which will involve states that have little or no contact with one another).

For example, arms races are thought to be one manifestation of an enduring rivalry. Looking at arms races in enduring rivalries provides some assurance that new weapons acquisition is directed at a specific opponent and that such increases are viewed as threatening (Diehl 1985a; Diehl and Kingston 1987). A similar logic underlies the substitution of

alliances and arms races, which often takes place over a broad time frame (Diehl 1994; Sorokin 1994). The most obvious use of enduring rivalries as a background condition is in the study of power transitions (Geller 1993; Wayman 1996). There, enduring rivalries perform the function of specifying the ongoing competition that will be affected by changes in the power distribution between the states. Other dyads might be open to the criticism that the states involved were not directly attuned to the actions of the other state or that the other state was not its primary rival.

Until recently, the primary use of enduring rivalry has been as a case selection device. Huth, Bennett, and Gelpi illustrate this case selection usage: ". . .the concept of a Great Power rivalry is critical because it identifies the population of cases to be used for testing the model's propositions" (1992, 483). Yet this is a crude way of linking rivalries to phenomena such as deterrence. What these authors are doing is making a theoretical claim about situations in which deterrent threats, for example, are likely to be made; the variables in their models then try to explain why such threats work or not. The rivalry approach suggests that these are related concerns and should be addressed together in the theory, and not relegated to a simple methodological issue.

The logical step is to include rivalry characteristics in the theoretical framework itself. First, this means abandoning the notion that there is necessarily a radical break between enduring and lower-level rivalries (in effect, taking "enduring" out of enduring rivalry research). It also means that the characteristics of the rivalry relationship are thought to influence the process under scrutiny, whether it be deterrence or the escalation of arms races to war. This forces the scholar to identify those characteristics in the model rather than to leave them subsumed under case selection and then forgotten.

In the rivalry as background condition literature, the rivalry concept already exists in the *theory,* yet to hide the theory in case selection distorts both. For example, the classic Richardson (1960a) arms race model includes the grievance term, which *de facto* refers to rivalry but is often ignored in the arms race literature. The power transition (see Kugler and Lemke's chapter in this volume) provides another example. It has two fundamental components, the power transition and competition/dissatisfaction with the status quo. Each is a necessary condition for war; if either is absent, no war is the prediction: "Only when a pair of states are relatively equal in capabilities can both sides in conflict realistically expect to win; only when the challenger is committed to change is there something over which to

fight" (Lemke and Werner 1996, 235). Strictly speaking, each component carries the same theoretical weight, but the power transition literature has only really worked on conceptualizing half of the theory. Frequently when rivalries are used for case selection they in fact form key elements of the theory. A better theory and methodology results from explicitly including them in the model to be tested. For example, an appropriate way to theorize about how the rivalry context may affect deterrent threats could be to see the effectiveness of the deterrence variables, as changing according to the underlying rivalry relationship. Credibility may be less effective in a short-term rivalry or an early stage of an enduring rivalry as little opportunity to build reputation has been present.

Empirical Research on (Enduring) Rivalries

In one sense, there has been an abundance of work on rivalries. Yet one would not necessarily see direct evidence of that in examining the scholarly literature. This is because work on rivalries has not carried the rivalry label and has primarily been confined to the analysis of a single prolonged competition between two or more states; most prominently have been those concerned with the United States–Soviet Union rivalry and the Arab-Israeli conflict. There are many primarily descriptive studies that, although insightful on individual events and relationships, do not offer much in the way of a theoretical understanding of how rivalries evolve; there is not much concern with process, as the analysis tends to be static. Furthermore, they offer little in the way of generalizations that extend beyond the single case at hand. Except as excellent sources on the history of individual rivalries, we largely ignore this segment of the literature in our review. More recently, the intrinsic importance of rivalries as a focus of study in their own right has been recognized. In the following sections we more systematically examine the research on the various aspects of the rivalry life cycle: its birth, life, and death as well as outside, exogenous effects on the rivalry dyad. We end with an examination of the outbreak of war in this life cycle.

The Origins of Enduring Rivalries

Various studies look to initial and other conditions to understand how rivalries, especially enduring ones, might develop. Goertz and Diehl (1995b)

report that political shocks at the system (e.g., changes in major power distribution) and state (e.g., civil wars) levels are virtual necessary conditions for the onset of enduring rivalries. They found that almost 87 percent of enduring rivalries began coterminous with at least one political shock. Further studies provide some insights about what other conditions might be associated with the beginnings of rivalries.

Levy and Ali (1998) conducted a case study of the Anglo-Dutch rivalry over the period 1609–52. They explored why a purely commercial rivalry remained peaceful for almost a half-century but turned into a militarized rivalry that was soon to experience three wars in relatively short succession. Initially, they point out that the Dutch and the English had diametrically opposed economic interests, which made them logical candidates to clash with each other. Reinforcing this conflict, economic liberalism determined Dutch strategies, while the English pursued a mercantilist strategy. Brummett (1999) also cites commercial interests as the basis for the rivalry between the Ottoman Empire and Venice. We should note that a related argument has been put forward by Friedman and Lebard (1991) with respect to future relations between the United States and Japan. They contend that the cold war held the two states together against a common external enemy (the Soviet Union) and the absence of that threat now will lead the two states to become serious rivals; they also argue that competition over resources will become stiff and almost inevitably involve military confrontation. Based on Levy and Ali's analysis, however, differing economic strategies or market competitions are not enough to turn a trade rivalry violent—several others factors must be at work.

One key factor is the relative power distribution between the two sides. Levy and Ali argue that English naval inferiority until the 1640s prevented them from seriously challenging the Dutch. This suggestion that power imbalance inhibits rivalry conflict is related to the contention of Vasquez (1993) and others that interactions between states of approximately equal capability will be different from other interactions and perhaps more severe. The presence of bipolarity might also make the two leading states more likely to be rivals, as might be argued in the case of the United States and the Soviet Union following World War II (Larson 1999). The logic is similar to the one here—one state cannot plausibly challenge another unless it has sufficient capabilities to make threats credible. Although approximate parity seems to be a vital condition for a militarized rivalry, two caveats are in order, one theoretical and one

empirical. Theoretically, parity may not be necessary if the potential rival disadvantaged by the status quo is superior in strength; in that circumstance, preponderance by the revisionist state may be enough to start a rivalry. Empirically, it is evident that not all enduring rivalries between states take place between approximate equals. Although lists of rivals vary across the studies, a significant minority of them involved states with widely disparate capabilities. Thus, approximate parity may be important in many cases, but it is not a necessary condition for militarized rivalry.

Another key factor, noted by Vasquez (1998a) in a case study of the Pacific theater of World War II, is the importance of territorial issues as a basis for enduring rivalries. Rule (1999) also notes that the competition over territory (along with ideology) was an important element in the origins of the France-Spain rivalry of the late fifteenth century. Although there have been a large number of ongoing claims over territory, not all of these have resulted in militarized disputes or the development of long-standing rivalries. Huth (1996b) looks at the role of territorial claims since 1950 in the origins of enduring rivalries. Huth uses a modified realist model, which includes both domestic and international political factors, to explain how states become involved in enduring rivalries over territory. Importantly, he notes that the relative strength of the challenger does not have much of an effect on rivalry involvement, and states also do not frequently challenge allies or extant treaty commitments by resorting to militarized action. Rather, domestic concerns, especially ethnic and linguistic ties between one's own population and those living in the disputed territory, are significantly associated with the recurrence of militarized conflict.

Domestic political pressures are also important factors in other analyses of rivalry origins. Levy and Ali (1998) note that early domestic instability in England inhibited its ability to challenge the Dutch. Later domestic political pressures led that rivalry to heat up, become militarized, and go to war several times early in the militarized phase of the rivalry. Vasquez (1998a) also cites domestic political pressures on Japan, which led to that state's expansionist drive in Asia and ultimately its attack on the United States. Maoz and Mor (1998) importantly affirm that cooperation among rivals is quite possible, but that this does not preclude the beginning or continuation of a rivalry. Rather, the key aspect is that both sides are dissatisfied with some situation leading to the onset and expansion of the rivalry. Yet it may also be that the absence of the ability or

incentive for two states to cooperate (to mutually benefit each other in any meaningful way) may be a force in promoting rivalry (see Schroeder's 1999 argument vis-à-vis the Franco-Austrian rivalry), although this alone would seem to be insufficient.

Thus, scant findings indicate that political shocks, parity, territorial issues, and domestic political pressures were associated with the beginning of rivalries, with no strong mitigating effects from some early cooperation between rivals. Some question remains about whether the origins of rivalries, even enduring ones, are any different than international conflict in general.

Dynamics of Enduring Rivalries

We have spoken here in particular of the origins of enduring rivalry. A related question asks why some rivalries become enduring. The literature on enduring rivalries provides some suggestions based on analyses of that group of rivalries, but until we compare enduring rivalries to proto-rivalries there is little definitive to offer. Only this comparison permits a test of hypotheses about the special early dynamics of enduring rivalry, because it contrasts them with rivalries that do not become enduring rivalry. Cioffi-Revilla (1998b) illustrates the conceptual impact of including all rivalries, not just enduring ones. In his analysis, if one looked only at enduring rivalries, one sees a perhaps counterintuitive decline in stability and life expectancy. But this is like examining the life expectancy of people who are 60 and older; that is, only focusing on the stability of rivalries that have already matured to enduring status. When you examine his results for all types of rivalries, the picture changes dramatically. There is a period of increasing stability before the rivalry hits the enduring stage, at which time it becomes more prone to termination.

More generally, a central disagreement revolves around whether rivalries "evolve" in some sense or whether they "lock in" to basic rivalry patterns at the outset. The debate has been conducted thus far basically between advocates of the "evolutionary" and "basic rivalry level" models. One model of rivalry evolution depends centrally on the concept of a basic rivalry level (BRL) (Goertz and Diehl 1998) and a punctuated equilibrium model (Diehl and Goertz 2000). Azar (1972) proposed that each pair of countries had an average level of hostile or cooperative interaction, which he termed their "normal relations range." Azar's idea of a normal relations range suggests the hypothesis that relations between states

vary within certain limits. Goertz and Diehl reformulate this in terms of a BRL around which relations fluctuate. When they speak of pattern in the evolution of rivalries, they refer to change in this basic rivalry level. The unmeasured BRL manifests itself in the severity and duration of disputes that arise between rivals. They propose that this BRL can show different patterns over the course of the rivalry such as increasing, decreasing, concave, or convex. Nevertheless, they argue that a constant, unchanging BRL describes best most rivalries.

The punctuated equilibrium model of rivalries states that periods of conflict and détente are "random" variations around a constant basic rivalry level: there is no secular trend toward more conflictual or more peaceful relations. The conflict level for successive confrontations in an enduring rivalry will be identically distributed, random variations around the unchanging rivalry baseline. In statistical terms, the differences between dispute severity and the BRL are random variables independent of past disputes and wars and constant from one dispute to the next (i.e., the standard assumptions one makes about error terms in linear models).

The punctuated equilibrium model does not suggest that all conflict within a rivalry is exactly the same over time. Indeed they expect some variation in severity and duration across different disputes (and some may be a function of endogenous influences). Furthermore, some large deviations from the basic rivalry level might be expected, namely war events. Furthermore, Goertz and Diehl do not suggest that variations from the BRL (be it constant or changing) cannot be explained and are indeed "random," but rather that there is no systematic factor derived from the previous dispute (beyond that captured by the BRL). They see this basic rivalry level as normally quite stable (except perhaps at the beginning and end of rivalries, or during periods of stress and shock). That is, they expect that patterns in rivalry conflict will "lock in" quickly at the outset of the rivalry relationship and remain that way throughout the rivalry. In effect, hostility does not "fade out" toward the end of rivalry, but the rivalry is likely to end abruptly.

In contrast, Hensel (1996a) offers an evolutionary model of the way that rivalries develop and therefore how conflict events are related over time. The evolutionary model does not assume that structural conditions determine the development of rivalries. Rather, rivalries change over time, and their conflict patterns may vary over the rivalry process and in fact are in part determined by that process. The evolutionary model

assumes that rivalries pass through different "phases," each with its own characteristics and conflict patterns. In effect, rivalry context is still important, but it changes over time and contexts are not necessarily unique to specific rivalries. Hensel (1996a) identifies roughly three phases in the evolution of rivalries. In the early phase of rivalry, states have little or no history to affect their current relations; neither is there a strong expectation of future interactions to guide their strategies. He argues therefore that conflict in this phase is less escalatory, involves less coercive bargaining, and is less likely to be followed by future confrontations than conflict in other rivalry phases. The intermediate phase is a transition one in which both the push of the past and the pull of the future begin to have an impact on conflict behavior. The advanced phase of rivalry is characterized by greater threat perception and competition between the rivals. The advanced phase also includes more repeated confrontations and more violence in those confrontations than either of the other two phases.

Both the punctuated equilibrium and evolutionary models postulate that rivalry context affects the likelihood and severity of future conflicts between the same pair of states. Yet they diverge on a number of dimensions. The evolutionary model argues that it is the interactions of states in those early confrontations that help determine if and how rivalries develop into enduring ones (or not). In contrast, the punctuated equilibrium model puts considerably less weight on those interactions, but more on structural factors that determine which will evolve into enduring rivalries. The punctuated equilibrium model postulates that rivalries are born healthy and hence likely to survive until they reach the enduring stage. The evolutionary model argues that events in youth have an important impact on which rivalries make it to old age. The patterns of conflict in rivalries according to the evolutionary model suggest rising hostility over time, either from crisis to crisis or at various inflection points or phases. Thus, the evolutionary model would predict that wars would occur later in enduring rivalries. In contrast, the punctuated equilibrium model states that wars may be just as likely at the outset of such rivalries as in later stages. Finally, the evolutionary model would predict greater variation in the conflict patterns during rivalries than would the punctuated equilibrium approach; the latter would expect such variation to be around the level specified by each rivalry's BRL.

There exists some evidence to support the constant basic rivalry level hypothesis. Goertz and Diehl (1998; Diehl and Goertz 2000) explored

whether patterns in the evolution of enduring rivalries followed that predicted by the constant basic rivalry level, the so-called volcano model (a pattern of rising hostility culminating in war and the end of the rivalry), or four other patterns. In terms of basic trends in enduring rivalries, they found that only a small percentage (between 5 and 20 percent depending on the study and indicator used) exhibited volcano-like patterns. In contrast, however, the BRL pattern of no secular trend was the primary one (more than two-thirds of the cases) found in their analyses.

Goertz and Diehl report no systematic relationship between the conflict level of successive disputes and no indication of a gradual escalation of conflict even at the beginning of a rivalry. Despite some results that indicated a constant conflict level throughout a rivalry, there were other indications of significant variation around that level. Structural factors will no doubt account for some variation around the BRL level, but their analysis cannot yet indicate whether the observed patterns are merely the result of structural factors or indicative of several different relationships inconsistent with the constant BRL model. Goertz and Diehl (1998) also note that the basic rivalry level "locks in" at the outset of the rivalry and does not "fade out" at the end; that is, they found no pattern of dispute escalation at the beginning of enduring rivalries or dispute de-escalation at the end. Other findings offer mixed support for the constant basic rivalry level with its quick lock-in and lack of a fade-out pattern. In their game-theoretic analysis of four Middle East rivalries, Maoz and Mor (1996) find that enduring rivalries exhibit acute conflict at the outset with a constant motivation to extend the conflict from the beginning; this suggests that conflicts do not "evolve" into enduring rivalries, but they may exhibit severe rivalry characteristics from their origin.

There is somewhat less empirical evidence directly examining the evolutionary model, although much of it is supportive. Hensel (1996a) finds that as a pair of adversaries engages in more frequent militarized conflict and thus moves along toward an enduring rivalry, their confrontations tend to become more severe and escalatory, more likely to end in stalemates, and more likely to be repeated. Vasquez (1998a) also reports a pattern of rising conflict in recurrent disputes during the U.S.-Japan rivalry that led to World War II, although this is clearly only one case. Other follow-up studies by Hensel also generally, although not universally, support the evolutionary model. Hensel (1998) found that the likelihood of conflict recurrence increased dramatically as one moved into later rivalry phase; the likelihood of recurring conflict doubled in the

intermediate rivalry phases and quintupled in the most advanced or enduring rivalry phase. Using events data, Hensel (1997) find that later phases of a rivalry exhibit more intense conflictual (and interestingly enough cooperative as well) interactions. Hensel and McLaughlin (1996) also find that a history of past disputes is associated with greater conflict in a rivalry. Yet, contrary to the evolutionary view, they also find that war is more likely *earlier* in a rivalry.

Also casting some doubt on the evolutionary approach is Maoz and Mor (1998), who found that the games of "Deadlock" and "Bully" were the most common in young rivalries, suggesting that the early stages of enduring rivalries are marked by hostility on both sides with few attempts (at least successful ones) at conciliation, cooperation, and conflict resolution. Cioffi-Revilla (1998b) addresses this debate through his focus on the stability of all—not just enduring—rivalries, where stability was defined as the probability of rivalry continuation into the future. In his analysis, a hazard rate for termination was used to indicate whether rivalries had an increasing or decreasing tendency to end, with the latter signifying a stable relationship. Cioffi-Revilla's results indicated three phases of rivalry stability: initial stability (consistent with a quick lock-in), maturation, and termination. In the initial phase, he discovered that rivalries were very stable and therefore not prone to end in their early phases. The maturation, or midlife, period shows that rivalries become mildly unstable, with an increasing hazard rate for termination; perhaps this indicates that many rivalries never go beyond the proto-rivalry stage and enduring rivalries are special cases that seem to run against the tide. In the termination phase, within the latter stage of rivalries, they have a strong propensity to end. (Bennett [1998] arrives at a similar conclusion.) Overall, both the constant BRL and evolutionary models have empirical support, largely from studies conducted by proponents of each approach.

Beyond the general debate over whether and how rivalries evolve, a series of studies focus on specific endogenous influences on rivalry dynamics. McGinnis and Williams (1989) modeled the U.S.-Soviet rivalry over time with appropriate consideration for how past actions affected contemporary and future decisions; even though the model was only for the superpower dyad, its applicability to other rivalries appears reasonable. More precisely, some scholars have looked at how previous interactions in the rivalry affect future behavior. Wayman and Jones (1991) consider the impact of previous disputes on subsequent disputes in a rivalry; they find that certain outcomes (e.g., capitulations) of those disputes are

more likely to produce frequent future disputes or disputes that are more violent (after stalemates). Similarly, Hensel (1996a) reports that decisive or compromise outcomes to disputes lessen the likelihood of future rivalry confrontations. There may also be some evidence of learning over the course of a rivalry; Larson (1999) argues that the United States and the Soviet Union learned conflict management and how to avoid war based on their behaviors during successive crises.

Hensel (1996a) finds that rivalries with a prominent territorial component and those that experience a capability shift among the rivals are more likely to have recurring conflict and have that conflict recur sooner. Yet he acknowledges that the strength of these general findings varies across different phases of rivalries, citing different patterns in the early parts of rivalries versus the middle or latter phases. Ingram (1999) notes a host of factors—technological, ideological, and geographical—as influences on the dynamics of the British-Russian rivalry.

Maoz and Mor (1998) find that the type of game played in enduring rivalries challenges widely held notions. Chicken and Prisoner's Dilemma have dominated the conceptual universe of game-theoretic thinking about international conflict. In contrast, Maoz and Mor find that other games occur as frequently or more than those two classic formulations. Particularly interesting is the importance of Bully and Deadlock in rivalries. Maoz and Mor also challenge common views about the stability of preferences. They found that with some regularity not only did the game change—which could be due to exogenous factors—but also preferences of the states varied. This is consistent with findings about democratization and rivalries that imply new values. Also, Goertz and Diehl (1995b) found that regime change shocks—again indicating new leadership with possibly new ideas—were closely related to both rivalry initiation and termination. Thompson (1995b) also emphasizes preference change at the end of rivalry.

Another conventional factor, democratic regime type, has also been the subject of analysis vis-à-vis conflict dynamics in rivalries. Although subject to some controversy, international conflict research (e.g., Russett 1993) has established that stable democratic states rarely or never fight against each other in a war. Not surprisingly then, some scholars have also found some pacifying effects from democracy in rivalries. Modelski (1999) claims that the rivalry between Portugal and Venice several hundred years ago was more benign than other rivalries because of its "democratic lineage" and that democratic rivalries are more peaceful and

more likely to be resolved "on their merits" rather than by military force. Thompson (1999c) also cites mutual democracy as a pacifying condition in the Anglo-American rivalry. The presence of a democratic dyad also apparently has a dampening effect on conflict recurrence in the rivalry (Hensel 1996a). A similar finding is reported by Sommer (1997) in his analysis of southern African rivalries. Nevertheless, Thompson and Tucker (1997a) note that intense rivalries can occur between democratic states and indeed argue that a significant portion of pre–World War II conflict revolved around U.S.-U.K. and U.K.-France rivalries (although they note that direct war was avoided in each case).

Hensel, Goertz, and Diehl (forthcoming) found that the democratic peace effect extends to rivalries, with joint democratic status making participation in rivalries unlikely (and foreclosing participation in the most severe of rivalries) and conflict levels lower; only a few rivalries over the period 1816–1992 involved states who were democratic throughout the entire rivalry and these rivalries generally did not develop beyond the nascent stage. Bennett (1997a) also finds that joint democracy leads to shorter rivalries.

Conflict Management in Rivalries

Hensel's evolutionary model of rivalry dynamics emphasizes the escalatory aspects of rivalry relationships. Nevertheless, rivals do not only fight with each other, but also occasionally try to manage their conflicts. As with the conflictual aspects of rivalries, scholars have implicitly used the rivalry framework to examine conflict management in specific rivalries. For example, Kriesberg (1992) gives much information about the conflict management efforts in the U.S.-Soviet and Middle East rivalries.

Goertz and Regan (1997) have proposed a number of criteria for successful conflict management in the context of enduring rivalries. One proposal takes the BRL level idea and looks for rivalries that have periods with a declining BRL. These are not necessarily common, but examples do exist. They then ask what other kinds of behavioral patterns might indicate successful management activity. They suggest that, in addition, a decline in the level of the most severe conflicts (e.g., avoidance of war) as well as a decline in the volatility of the rivalry might also fit the conflict management concept. They find that some enduring rivalries do appear to succeed in conflict management, but they provide nothing more than a preliminary analysis of different dependent variables.

Bercovitch and Diehl (1997) conducted a study of international mediation attempts that focused on the short- and medium-term effects of mediation in enduring rivalries. They found that mediation had little effect on the next dispute in the rivalry, except a modest lengthening effect on waiting times for the next dispute. Furthermore, the presence or absence of those efforts does not appear to have any impact on significant deviations from those levels, namely the occurrence of war. Bercovitch and Diehl also briefly address the key issue of conflict management in enduring rivalries versus other types of rivalry. Because almost all the mediation literature uses case studies or pure cross-sectional methods, much remains to be investigated (see Bercovitch and Diehl 1997; Bercovitch and Regan 1997).

Undoubtedly the whole issue of conflict management remains one of the most important items on the future rivalry research agenda. Most scholars have approached rivalries because they seem particularly war and conflict prone, but the longitudinal dimension and the noncrisis periods make it a natural framework to investigate theories of security regimes, mediation, and other conflict management techniques.

The Termination of Rivalries

Conflict resolution efforts may contribute to the termination of rivalries, but many other factors may be involved. Hence the termination of rivalries differs significantly from the extensive literature about the termination of war. Wars take place at various junctures of rivalries, at the beginning, middle, and ending phases. Thus, understanding how a particular war ends may offer few or no clues to the end of a rivalry, which may persist for decades after war termination. Cioffi-Revilla (1998b) and Bennett (1998) show that rivalries are more likely to end the longer they persist. Although the hazard rate for rivalries may be increasing, their conflict level shows little sign of abating and the precise time point of rivalry termination cannot largely be predicted by the hazard rate.

There are several possible answers to the puzzle of how rivalries end, something that is not well understood given the sudden and largely unexpected end to the cold war. Bennett (1993, 1996) also adopts a rational choice perspective in attempting to explain rivalry termination. As we suggested earlier, his empirical analysis finds that the occurrence of war in a rivalry does not affect the duration of that rivalry. Neither does the

existence of bipolarity or the balance of power between the rivals (in contrast to Levy's [1999] findings, which were based on only one rivalry) seem to enhance the prospects for ending rivalries. Instead, relatively low issue salience at the center of the rivalry contributed to shorter rivalries. Again, territorial issues were thought to be a key example of high salience issues. As we have already noted, the absence of territorial issues made rivalries less likely to start and escalate to war if they did begin; now we also see that the lack of a territorial component to the rivalry may make it end more swiftly. Bennett also notes that common external threats for the rivals makes them less likely to continue their competition. One might assume that common external enemies not only engender greater feelings of amity between the rivals ("the enemy of my enemy is my friend"), but also other rivalries reduce the resources and attention that can be directed to extant rivalries; states must make choices on which enemies to focus upon and this may mean ending one rivalry in order to pursue others.

Two other approaches explore the conditions under which rivalries are terminated. Gibler (1997a) demonstrates that rivalries can end with the signing of an alliance that is in effect a territorial settlement treaty. This finding is largely consistent with research discussed earlier that suggested a strong territorial component to the origins of enduring rivalries. Although Gibler does not investigate whether territorial disputes were important in the origins of the rivalries he considers, he does find that the rivalry ends when the territorial dispute is removed from the relationship. Goertz and Diehl (1995b) argue that political shocks are a necessary condition for the termination of conflict. In particular, they cite dramatic changes at the system level, including world wars and major power distribution shifts, as well as shocks at the state level, including civil war in one of the rivals, as factors associated with the end of rivalries. Although such shocks are coterminous with the end of rivalries, Goertz and Diehl leave unspecified what other factors contribute to the end of rivalry. Shocks are hardly a trivial condition, but neither are they close to sufficient in precipitating rivalry termination. Levy and Ali (1998) point out the importance of political shocks on the stability of rivalry relationships. The Thirty Years War in Germany is cited as a shock that profoundly altered Dutch relationships with its current and potential rivals in the seventeenth century. The death of Frederick Henry also brought a lull to the Dutch-Spanish competition and set in motion events that led to increased competition with the British.

Although political shocks may lead to rivalry termination, a war between rivals does not necessarily constitute such a shock. Wars can signal the beginning of a rivalry, occur during the middle phases, or in some cases constitute the final hostile act in the rivalry. With respect to the latter, it may be that certain kinds of systemic wars may be especially associated with the termination of enduring rivalries. Midlarsky (1988b) identifies "mobilization wars" as those that result from one power's mobilizing resources for war and the change in the salient power dimension is seen as unacceptable by one or more of the protagonists. Enduring rivalries may be particularly susceptible to ending following the conclusion of such mobilization wars; Midlarsky notes that the Franco-Spanish rivalry ended at the time of the war of Spanish succession in the early eighteenth century and the Franco-German rivalry ended after World War II. Even if the rivalry does not end with a mobilization war, that event may signal a diminution of hostilities as can be seen in the Franco-British rivalry after the Napoleonic Wars and the Israeli-Egyptian rivalry following the 1973 Yom Kippur War. Similarly, it may prove that the Serbo-Croat rivalry in the 1990s has been moderated or perhaps ended by the mobilization aspects of the Croat military initiatives (Midlarsky 1997a).

Bennett (1998) attempted to synthesize many of his and other findings on enduring rivalry termination. He concludes that domestic political factors and issue salience seem to be most associated with rivalry termination. He finds distinctly mixed results on security concerns as a driving force behind the end of rivalries. Similarly, he also gets mixed results on the impact of political shocks on rivalry termination. Yet his analysis of political shocks does not properly test the Goertz/Diehl contention that shocks operate only as a necessary condition for rivalry termination (his analysis treats them as necessary *and* sufficient). Furthermore, his analysis assumes that political shocks have an immediate and single year effect on rivalry behavior, a conception at odds with our contention that major political changes are likely to reverberate through the system over the course of several years, rather than at a fixed point.

One of the central problems in the rivalry termination literature is the different specifications of an ending date for rivalries (noted earlier in the discussion of operational definitions). Most definitions of enduring rivalries identify their ends after some period (usually 10 or 15 years) without the occurrence of another militarized dispute between the rivals. The exact date of rivalry termination is often quite ambiguous in these studies. Yet Bennett (1993, 1996, 1997a, 1998) relies on the resolution of the

disputed issues and/or a formal agreement to pinpoint the end of a rivalry (although he too is dependent on the absence of subsequent disputes). Differences in identifying the rivalry termination point can be dramatic and, most important, can make a significant difference in testing models of rivalry termination (Bennett 1997b); this makes comparisons across studies difficult and integrative cumulation problematic.

Finally, there is also a plethora of studies that seek to explain the end of the cold war (e.g., Deudney and Ikenberry, 1991–92). Unfortunately, there are several problems with this literature if we are interested in insights on rivalry termination. First, much of the literature is concerned with explaining the collapse of the Soviet Union. The end of the superpower rivalry is then treated as one of many consequences of that collapse. Yet theoretically it is not clear whether a point is being made about domestic political changes and the end of rivalries or whether the end of rivalries is somehow slightly different from the implosion of one of the rivals. Second, it is not clear (whatever the focus) that such studies can or are designed to be generalizable to rivalries other than the U.S.-Soviet one.

Despite these limitations, Lebow (1994b) has attempted to use the cold war case to develop a set of conditions he believes accounts for the thawing of U.S.-Soviet relations under Gorbachev and the winding down of rivalries in general (Lebow 1997). For accommodation to occur, he argues that the presence of the following three conditions for one of the rivals is critical: (1) a leader is committed to domestic reforms, where foreign cooperation is necessary for those reforms, (2) rivalry and confrontation has failed in the past to achieve a rival's goals and will likely fail in the future, and (3) the belief exists that conciliatory gestures will be reciprocated. Thus, Lebow sees the end of rivalries beginning from domestic political considerations.

Exogenous Influences on Enduring Rivalries

One major form of exogenous impact is the linkage *between* rivalries. The dynamics of rivalries are influenced not only by their own pasts but also by their interconnections with other conflicts and rivalries. Muncaster and Zinnes (1993) create a model for an N-number of states that is capable of tracking the evolution of rivalries, including how those rivalries influence the relations (and potential rivalries) of other states in the system. A dispute involving two states not only influences their future relations but also affects all other dyadic relations in the system. Also in the

formal modeling tradition, McGinnis (1990) offers a model of regional rivalries that identifies optimum points for aid, arms, and alignments in those rivalries; this again provides for exogenous conflicts to influence the dynamics of rivalries.

A number of empirical studies confirm the significance of third-party conflict to the dynamics of rivalries. Ingram (1999) notes that the British-Russian rivalry was influenced by these states' relations with Asian client states. Schroeder (1999) boldly states that the Franco-Austrian rivalry was kept from being resolved by its interconnection with other ongoing European rivalries. According to Levy and Ali (1998), the end of the Dutch revolt against Spain led to the conditions that permitted Dutch economic expansion and the initiation of the rivalry with England. States sometimes have limited carrying capacities in the number of rivalries to which they can devote attention and resources. The Anglo-Dutch rivalry was also linked with the Anglo-French rivalry. England's undeclared war against France resulted in the seizure of Dutch ships that were trading with France, analogous to the contagion model noted by Siverson and Starr (1991) in which a given conflict spills over to encompass neighboring countries. The intersection of these two rivalries had the effect of escalating the competition between the Dutch and the English, who had previously managed their disputes without resort to war. Kinsella (1994a, 1994b, 1995) studied the dynamics of some rivalries in the Middle East with special attention to how the superpower rivalry influenced these minor power rivalries. There is a pattern of action-reaction to superpower arms transfers to that region. He finds that Soviet arms transfers exacerbated rivalry conflicts in several cases, whereas U.S. arms supplies to Israel had no strong positive or negative effects. He also notes that U.S. arms transfer policy may have actually dampened conflict in the Iran-Iraq rivalry. It is clear from Kinsella's studies that the superpower rivalry affected the dynamics of the minor power rivalries in the Middle East, although the reverse was not generally true.

Goertz and Diehl (1997) further confirm that rivalries are closely linked (through alliances, contiguity, common dispute participation, and common rivalry foes), and this has a clear impact on their conflict levels. They found an important impact of major-major enduring rivalries on minor power ones. They confirmed that in general the conflict levels of linked rivalries should be higher than those of unlinked rivalries. The volatility of some linked enduring rivalries was also greater, but the results were not as robust. Their findings were largely the same for

the frequency of war as they were for the conflict level. A cross-temporal analysis of rivalries that had prelinked, linked, and delinked periods showed little variation in their basic conflict level, but war was more common during linkage, and less so in the other two periods, especially in the prelinked periods. Bennett's (1996) analysis of rivalry termination also indicated that some rivalries end when the rivals begin to have common external security threats; in effect, the advent of new rivalries with negative links to extant rivalries causes the latter to end.

Various (structural) aspects of the regional or international system form a second key set of exogenous factors. The end of the cold war was an exogenous shock for most minor power rivalries. For example, Maoz and Mor (1998) find that periodically games get redefined as a result of exogenous events. Ideally, they want to have a completely endogenous explanation for the transition between games, but they found they needed to include exogenous shocks and other factors as well.

Systemic effects can take many forms. For example, Cioffi-Revilla (1998b) found twentieth-century rivalries to be more unstable. The twentieth century has significantly more rivalries than its predecessor, owing largely to the relative ease at which states can interact with one another and the larger number of states in the international system; in effect, the "opportunity" (Most and Starr 1989) for rivalries is greater. The greater number of rivalries (of all varieties including enduring ones) may mean that states must divide their attention and resources more broadly than in the past, and it may not be surprising that some rivalries end quickly as states move on to meet other, more pressing challenges. Of course, the declining stability of rivalries in the twentieth century might also be related in part to another trend uncovered by Cioffi-Revilla: bipolar systems produce more unstable rivalries than multipolar ones. The cold war bipolar system may then account for the relatively greater instability than the nineteenth century, which was multipolar throughout.

Systemic conditions are often cited by neorealists and idealists as constraining or enhancing choices for war. According to limited current research, some aspects of the international system were important in affecting the onset of war in rivalries, but generally they were not central. The balance of power at the system level is a classic neorealist factor, but Levy and Ali (1998) note that this made little difference in the rivalry development or war between the British and the Dutch. Nevertheless, Vasquez (1998a) cites another systemic variable largely ignored by real-

ism and its variants: international rules and norms. He notes that the breakdown of the Washington Conference structure, which sought to control military competition (especially in weaponry) between the major powers after World War I, removed the rules and norms necessary to "manage" the competition between the leading Pacific states. In this way, limiting the anarchy of the international system can have a mitigating effect on rivalry competition, and while perhaps international norms and rules may not be enough to prevent or end rivalries, they might assist in restraining the most severe manifestations of rivalries. A similar argument is made by Larson (1999) in her assessment of why the superpower rivalry managed to avoid war.

War in Rivalries

Of course, most international conflict research in general has been concerned with the conditions associated with the outbreak of war. Little of the research directly on rivalries, however, has dealt with war. Those studies that use rivalries as a background condition focus on war, but they answer questions about deterrence, power transitions, arms races, and their relationship to war rather than making direct theoretical contributions about rivalries and war. There are nevertheless a few exceptions to this pattern. Vasquez (1993, 1996) argued that geographic contiguity between rivals was the critical factor in whether a rivalry went to war or not; geographic contiguity between rivals signifies that the conflict between them was a territorial one, and in the view of Vasquez, conflict without this strong territorial dimension will not end in war. Thompson (1999a) makes a similar argument in noting that the Anglo-American rivalry only experienced one war and this early on, in part, because any territory in dispute between the British and the Americans was judged not to be worth fighting over. Vasquez (1996) identifies two paths under which rivalries go to war. In the first path, dyadic war is triggered by a territorial dispute in a process described in his "steps-to-war" model (Vasquez 1993). The other path to war involves rivals without a territorial dispute joining an ongoing war because of what he refers to as contagion factors.

Other conventional factors thought to be associated with war also receive a mixed assessment from current studies. The power distribution is often a centerpiece of models of international conflict, although there is considerable disagreement among scholars whether parity or

preponderance is the most dangerous condition. Geller (1998) finds no general relationship between the capability distribution and the identity of the initiator of wars in major power rivalries. Nevertheless, he points out that *unstable* capability distributions are substantively associated with the occurrence of war, although he is quick to acknowledge that they approach a necessary, but not a sufficient, condition for conflict escalation in the rivalry. Changing capability balances in major power dyads have recently been found to be significant in several studies (e.g., Huth, Bennett, and Gelpi 1992). Geller's findings are also consistent with dynamic models of capability change, including the power transition and hegemonic decline models.

Domestic political processes again were found to be critical in the dynamics of enduring rivalries. Vasquez (1998a) notes that domestic hard-liners pushed for war in Japan, preventing that country from making more conciliatory gestures and accepting some peace offers short of war. Levy and Ali (1998) also note strong domestic pressures in England for hard-line policies and external actions. Perhaps this is why the English adopted a hard-line bargaining strategy that prevented effective conflict management. In contrast, Thompson (1999a) argues that domestic political pressures in Britain actually encouraged de-escalation and lessened the chances for war in its relations with the United States.

The conditions for war in rivalries were generally not those at the systemic level according to previous research, although there was a suggestion in one case that international norms and rules might have mitigated the war in the Pacific. Unstable military balances, rather than a particular capability distribution, tended to reinforce or exacerbate the processes leading to war in rivalries. Territorial issues were again most often associated with conflict escalation in enduring rivalries, and democratic dyads are thought to help rivals avoid war.

Future Research Agenda

The rivalry approach has many dimensions. This arises from the two central characteristics we have emphasized throughout: rivalry as a new unit of analysis, and the temporal, longitudinal character of rivalries. Not surprisingly, scholars have applied the same hypotheses to rivalries as they have to war. We have seen studies of power transition, arms race, demo-

cratic peace, deterrence, and other phenomena in the rivalry context. The temporal duration of rivalry means a new set of hypotheses regarding patterns of rivalry evolution, both in the conflictual as well as the conflict management sense. Very few of these issues have been studied at great length, so they all easily merit inclusion on a list of future research topics. Nevertheless, we limit our discussion to aspects directly related to rivalries and their life cycle. Although the occurrence and impact of arms races, deterrence, and so forth deserve attention, we leave that to other works devoted specifically to those subjects.

The key item on any research agenda is rivalry dynamics. Not only does this involve the BRL and the evolutionary models, but also the relationship between proto- and enduring rivalries. One test would be to analyze conflict patterns within the population of enduring rivalries. The hypothesis to be tested could be that conflict in early stages of enduring rivalries is less severe than in later stages. A corollary proposition is that there is no significant difference in conflict severity in enduring rivalry early stages and comparable phases in lesser rivalries. The evolutionary model is consistent with each of these hypotheses, and the BRL model would predict the opposite: more severe conflict in enduring rivalries than other rivalries and that severity relatively consistent over the life of rivalries. This would help us answer some questions about the relative importance of issues versus interactions, or structure versus process, in the development of enduring rivalries.

There seem to be at least three other critical areas of research concerning the dynamics of enduring rivalries: their maintenance, variation in the basic rivalry levels across rivalries, and the volatility of conflict within rivalries (including most significantly the outbreak of war). The first concern is with the maintenance of rivalries. Cioffi-Revilla (1998b) and Bennett (1998) indicate that rivalries are unstable in their later phases, suggesting that some process sets in to reverse the effects of rivalry maintenance factors. Yet according to conventional definitions of enduring rivalries, they can last 40+ years (and this is probably a low estimate given that some of the rivalries in these studies have not ended and therefore the end dates are censored and will underestimate the true length of the competitions). Some factors are at work that seem to mitigate the unstable tendencies of rivalries, or there may be "stress" that appears only later, allowing some rivalries to persist well into the future. A valuable line of research might be to identify the conditions that make rivalries persist and conflict to recur repeatedly in the rivalry.

There are some clues to the conditions for rivalry maintenance. One possibility is the kind of issues or stakes under dispute. Vasquez (1996) suggests that territorial disputes are most prone to recurring conflict, given that they relate closely to concerns about national identity and can become linked to other intangible and indivisible stakes; Huth (1996a) makes similar claims in his study of territorial disputes. Hensel (1996a) confirms the importance of territorial disputes in prompting future conflict and doing so more rapidly than other issues. Thus, another consideration is to go beyond the structural aspects of the rivalry relationships and concentrate on the interactions between the rival states. In effect, the past and present dynamics of a rivalry will influence its future dynamics. Maoz and Mor (1998) indicated that only when there is some dissatisfaction among at least one of the rivals does a rivalry continue; some game structures make this all but inevitable (e.g., Bully games will leave the losing side unhappy with the inferior payoff). Yet it also suggests that certain outcomes of disputes are more likely to prompt future conflict. Those outcomes that do not resolve issues in disputes (stalemates) may lead to a return to militarized confrontation; Vasquez refers not only to territorial issues, but *unresolved* ones as instigators of recurring militarized conflict. Similarly, Hensel (1996a) finds compromise dispute outcomes dam-pen the prospects for future conflict.

Another aspect, one even less explored, is the short-term dynamics of rivalries. What is the impact of the last dispute or two on the next one? on the waiting times until the next dispute? Many factors can have both short- and long-term effects. This is another aspect of the contrast between the punctuated equilibrium and evolutionary approaches: the former states that factors fixed early have long-term effects while the evolutionary approach stresses the importance of short-term influences. Maoz and Mor's (1998) along with Thompson's (1999b) case studies show that intensive analyses of individual rivalries can produce insights of great importance. These trace in detail the relations between conflicts that lie at the heart of rivalry approach.

We need much more work that compares *between* rivalries. As we noted earlier most of the rivalry research adopts the cross-sectional time-series approach, which has a tendency to make the differences between rivalries disappear. As much can be gained between comparing rivalries over time within the rivalry as differences between rivalries. This will be key particularly when investigating the system-level factors and their impacts on rivalries. It also permits the investigation of structure of the

rivalries themselves. For example, Vasquez (1993) has proposed that the behavior of asymmetric rivalries differs radically from symmetric ones. The empirical investigation of this idea requires between-rivalry comparisons.

Why some rivalries have higher basic rivalry levels than others and some exhibit more variation (volatility) than others relates to between-rivalry comparisons. Another area of fruitful research would be to understand why some rivalries are far more hostile than others—this goes beyond concerns of duration and stability noted earlier to those of conflict intensity. Clues to the preceding puzzle might be found in other traditional correlates of war. One possibility suggested by Geller (1998) is the instability in the power distribution, which prompts greater uncertainty and threat for the rivals. One might also return to the issues in dispute noted in the preceding as an explanation: territorial and other disputes may present higher stakes that lead rivals to adopt more coercive bargaining strategies and respond to challenges with a higher level of force. Of course, certain game structures, suggested by Maoz and Mor (1998), tend to produce more conflictual outcomes (whereas some offer greater incentives for cooperation). It may be useful to compare the game structures across different rivalries to explain the higher levels of conflict in some rivalries. A focus on the game transformation process would help us not only with rivalry dynamics but also in devising strategies to "downshift" especially dangerous rivalries (assuming that game transformation conditions are manipulable by rivals or by external intervention).

Finally, the volatility of rivalries is a prime item for an enduring rivalries research agenda, principally because we share a strong concern for the most dangerous of deviations in the rivalry relationship—war. Understanding volatility and war in enduring rivalries is partly related to understanding differences across rivalries in the basic rivalry level. Those rivalries that regularly operate at high conflict levels need less of a push to cross the war threshold than those rivalries that do not move much beyond the mere threat to use military force. Yet, beyond this, there still lies the concern with what factors make a rivalry more or less hostile at various points. Geller's unstable capability distributions may ratchet a rivalry up the escalation ladder and account for why he finds that instability so important in the outbreak of war among major power rivals. Changes in rivalry conflict levels may also be affected by other challenges or disputes that a given rival may face, beyond those in the immediate rivalry; there even may be a dampening effect on outside conflict and rivalry conflict

when the attention and resources of rival states are stretched. These are provocative ideas that enduring rivalry research has barely considered.

We end this survey of the future research agendas with strong support for a closer examination of conflict management and rivalry termination. All too often the study of war has remained divorced, both conceptually and professionally, from the analysis of peace. The study of war was given a tremendous boost when the COW and other projects provided standard data for testing hypotheses. Although we do not have those data yet for rivalry termination, we now at least have a conceptual grasp on the problem. We hope that some day analyses on rivalry termination—for *all* rivalries, not just enduring ones—will generate the variety of theories of peace that we currently have for war. Perhaps the next edition of the *Handbook of War Studies* will have a companion volume: *Handbook of Peace and Conflict Management.*

Notes

1. In addition, a dispute in an enduring rivalry is more than four times as likely to end in war than one in isolation. Another test is to treat the rivalry as a unit of analysis in order to see if at least one war occurs at some point in the rivalry. The propensity for war grows dramatically as one moves from isolated conflict to the most severe enduring rivalries (almost four times as great in enduring rivalries as in the lowest rivalry category). In enduring rivalries, the chances are better than 58 percent that the two states will go to war at some point in their competition (Diehl and Goertz 2000; Goertz and Diehl 1992a). The only argument against the significance of enduring rivalries is made by Gartzke and Simon (1999). They argue that the distribution of enduring rivalries (unfortunately they do not consider all types of rivalries, a more valid test) across a continuum of dispute frequency is similar to that predicted by a random events model; in effect, they are arguing that repeated militarized disputes might easily occur by chance. Nevertheless, such an argument ignores that conflict patterns, as described earlier, do not occur randomly, and there is a pattern of greater hostility in more enduring rivalries (a random events model would predict no difference in conflict patterns across different kinds of rivalries).
2. Multilateral rivalries are related to what Buzan (1983) refers to as 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, 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). Not surprisingly, Buzan uses the South Asian security complex as an example with the India-Pakistan rivalry as its dominant feature.

3. See Goertz and Diehl (1993) for a discussion of how the enduring rivalry concept differs from that of arms race and crisis.
4. Another set of consequences resulting from the new unit of analysis is a better understanding of the linkage between conflicts. Diffusion research has focused on how war begets war (Most, Starr, and Siverson 1989; Siverson and Starr 1991). Within the rivalry approach this becomes much broader—how rivalries influence each other. The rivalry approach incorporates not only temporal dynamics, but spatial ones as well. For example, alliances are usually thought of as linking states, but alliances are just one of the elements that link dyadic rivalries. The alliance can be a cause of a new rivalry or a consequence of the tighter linking of two existing rivalries. Thus, the rivalry approach can provide a more complex and, probably, more accurate understanding of the effect of alliances on the spread of conflict (and vice versa). The rivalry approach further changes the orientation of traditional diffusion studies. One consequence of replacing war with rivalry in the diffusion framework is that war can arise without a previous war occurring as the initial cause. This is possible because the rivalry continues during times without active hostilities. Thus, there may be no war at time $t - 1$, but there still may be conflict diffusion at time t as long as there was a rivalry at $t - 1$. The rivalry approach is broader in that (1) it accounts for diffusion in the absence of war, and (2) it identifies diffusion involving lower levels of conflict than full-scale war. Another consequence of the rivalry approach is to propose an explanation for the absence of war diffusion (or so-called negative diffusion). The attention and resources that must be devoted to an ongoing rivalry relationship may reduce the ability of individual rivals to engage in conflict with other adversaries. Rivalries (particularly enduring ones) may generate conflict locally (as suggested by the diffusion literature), but at the same time other disputes involving the same protagonists become less likely. Thus, the rivalry approach is more nuanced in that it offers an explanation why some conflicts expand and why others are less likely to occur.