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R E S E A R C H

Hurting Stalemate or Mediation? The Conflict over Nagorno-Karabakh, 1990–95*

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The impacts of six attempts to mediate the conflict over the political status of Nagorno-Karabakh in the Caucasus region of the former Soviet Union were compared. Each mediation was intended to get the direct parties – Armenia, Azerbaijan, and Nagorno-Karabakh – to the negotiating table. Nearly 4,000 events were recorded for a six-year period from 1990 through 1995. Each event was coded in terms of a six-step scale ranging from a significant action toward peace (+3) to substantial violence directed at an adversary (–3). Time-series analyses of changes in the extent of violence showed no change from before to after any of the mediations. A significant change did occur, however, between the months preceding and following the period of intensive combat between April 1993 and February 1994. These results support the hypothesis that a mutually hurting stalemate is a condition for negotiating a ceasefire and reduced violence between warring parties. A number of theoretical and practical implications of the findings are discussed.

Introduction

The conflict over Nagorno-Karabakh has a long history. In 1921, Joseph Stalin and Vladimir Lenin, working through the Caucasian Bureau of the Russian Communist Party, pacified Mustafa Kemal, the demanding leader of the Turkish Nationalist Army, by assigning the disputed territory of Nagorno-Karabakh to Azerbaijan. This decision angered the Armenian leaders who, having been forced into the Soviet Union, learned that Stalin had little patience for their complaints, holding out the prospect of severe recriminations if actions were taken by them. The conflict thus remained latent during the Stalin era, leading to a perpetuation of the

myth of brotherly cooperation between the neighboring Soviet Republics.

The leadership transition from Stalin to Khrushchev in 1953 provided opportunities for the Armenian leaders to express their dissatisfaction with the status quo. Moscow was overwhelmed with protests from the Armenians and petitions from thousands of Armenians living in Nagorno-Karabakh favoring annexation to Armenia. Although the protests continued to be made to Khrushchev's successors, they fell on deaf ears. Bolstered by Gorbachev's open policies, the protests took on a strong nationalist flavor, preparing the way for an independent Armenia. In 1990, just before the Soviet Union was about to be dissolved, the conflict between Armenia, the Nagorno-Karabakh Armenians, and Azerbaijan over Nagorno-Karabakh escalated dramatically, becoming the first and arguably the most violent conflict between post-Soviet republics.

Our analysis of the conflict begins in 1990. We compare the effectiveness of several efforts to mediate the conflict between Armenia, Azerbaijan, and the Nagorno-Karabakh Armenians concerning the political status of Nagorno-Karabakh in the Caucasus region of the former Soviet Union. We focus on the period from January 1990 to December 1995, with discussion beyond the latter date for discerning longer-term changes in relations among these parties. For the sake of clarity in analysis, Armenia and the Nagorno-Karabakh Armenians are considered one party to the conflict, Azerbaijan is another, and the mediators the third parties.

During the focal period of this study, six major attempts were made to mediate the conflict. Each is described briefly in chronological order.

Boris Yeltsin and Nursultan Nazarbayev: September 1991

With the collapse of Moscow's control of the Soviet republics imminent, President Yeltsin of Russia and President Nazarbayev of Khazakhstan took the initiative to fill the leadership vacuum that each anticipated would follow. It is likely that the personal ambitions of these presidents, more than the fate of Nagorno-Karabakh, motivated them to intervene in the conflict. Three months into the mediation President Gorbachev resigned and these mediators turned their attention elsewhere.

Iranian Mediation: February to May 1992

Iran's close historical relationship with both Armenia and Azerbaijan gave its mediation efforts legitimacy. Its desire to maintain this relationship, to bolster its standing as a regional power, and to prevent Turkey from gaining regional dominance combined to

motivate its team to intervene. However, when the discussions in Tehran collapsed, the Conference on Security and Co-operation in Europe (CSCE) assumed the lead intervention role squeezing the Iranian team out as a non-member of its organization.

Nazarbayev Intervention: August 1992

Fearing a Russian incursion into Kazakhstan, President Nazarbayev vehemently defended the principle of non-alteration of borders above national self-determination. For this reason his intervention was perceived differently by the Armenians (as biased) and the Azerbaijanis (as fair). These asymmetrical perceptions led to the collapse of this short-lived mediation.

CSCE Intervention: February 1992 to December 1994

This conflict provided an opportunity for the CSCE to establish itself as an effective regional conflict prevention/settlement organization. It created the Minsk Group of nine national representatives to deal with the conflict. However, its lack of experience with these types of conflicts and reduced solidarity among its members combined with Russia's regional ambitions and Turkey's advocacy role to weaken the intervention. As its member-states attempted to advance their own agendas, the CSCE became increasingly indecisive through the course of the three-year intervention.

Russian Mediation: November 1993 to December 1994

Vladimir Kazimirov, Russia's envoy to the Minsk group, began shuttle diplomacy as a challenge to the CSCE's role as lead mediator. At this time, Azerbaijan launched a counter-offensive to drive the Armenian

forces from Nagorno-Karabakh. Their suspicions about Kazimirov's intentions made them reluctant participants in the mediation process. The Russians' competition with the CSCE combined with perceived mistrust by the Azerbaijani leaders to derail this year-long mediation effort.

Co-chairs Mediation: January 1995 to Present

Co-chairs were appointed by the Organization on Security and Co-operation in Europe (OSCE) at the Budapest Summit in December 1994 to lead the Minsk group. The current co-chairs are from Russia, France, and the United States. However, exclusion of the principal parties in the planning process and a lack of innovative approaches by the co-chairs presage further impasses in the years to come.

In May 1994, the parties agreed to a ceasefire that has generally held to date. They have not, however, resolved their differences. The Karabakh Armenians and Armenia[1] insist that the negotiations commence as a 'complete package' (including the political status of Karabakh) while Azerbaijan insists that a 'step-by-step' (or incremental) solution may gain significant movement toward peace. Adding to the intractability of this conflict, Azerbaijan refuses to talk directly with the Karabakh Armenians. Azerbaijan's leaders argue that the Republic of Armenia is the principal and only foe. Led by President Heyda Aliyev, Azerbaijan will not acknowledge the Karabakh Armenians as an entity separate from Armenia (Azerbaijan International News Agency – Assa-IRADA, 23 December 1997).

[1] When former President Levon Ter Petrossian sought a compromise solution to the conflict and shifted his support from a 'package' to a 'step-by-step' approach, the Armenian voters lost confidence in him causing him to resign. The newly elected President, Robert Kocharian, is an advocate of a tougher approach supporting the 'package' solution (Mooradian, 1998).

Impact of the Mediations

This case provides an opportunity to address hypotheses about timing for mediation. A question of interest is whether the mediations contributed to the ceasefire agreement: Did the mediators persuade the parties to de-escalate the conflict? One perspective on de-escalation emphasizes timing and readiness. Conflicting parties resolve their differences when they are ready to forego unilateral means for attaining a settlement favorable only to themselves (Zartman, forthcoming). Mediators are more likely to succeed when this realization, referred to also as 'ripeness', occurs. Jeffrey Rubin (1991) contends that an intervention has to be timed propitiously so that a conflict's seminal elements fit together, thereby enabling the leaders to move from confrontation to cooperation to resolve their differences. Richard Haass (1991) maintains that one must turn to the concept of ripeness to discover why some agreements prove possible and others do not.

Timing can be construed in positive terms, as opportunities to prevent violence before it occurs or before it escalates to dangerous levels. By taking advantage of opportunities, mediators can contribute to the resolution of a conflict before it escalates. Timing can also be regarded in negative terms, as a way out of a seriously deteriorated situation. By taking advantage of hurting stalemates, mediators can contribute to settlements after the conflict has escalated (Zartman, forthcoming). These moments for settlements of conflicts can be seized by the parties themselves or they can be introduced by third parties. Both types of motivations for settlement were available in this case, and are examined in this study.

Five of the mediations occurred during periods of intense conflict but before the parties suffered major casualties or losses of weapons, equipment, and supplies. Of

interest is whether these mediators could identify opportunities to bring the combatants to the negotiating table. Once identified, however, the mediator must persuade the parties to take advantage of the 'attractive' opportunity. This is more likely to succeed when the parties perceive the mediator's proposal as a way out of an undesirable impasse or as a step on the way to a desired improved relationship. To the extent that either or both of these conditions are satisfied, the mediation has achieved its goal and the conflict is deemed ripe for resolution (Zartman, 1989). By examining the results of each of the mediation efforts in this conflict, this study provides evidence that addresses the issue of timing as opportunities to settle before further escalation occurs.

Mutually Hurting Stalemate

I. William Zartman (1991) and others have argued that when neither side sees a likelihood of victory and they have exhausted their resources, they have strong incentives to negotiate or to seek mediation (see also Stedman, 1991). In essence, the pain for continuing warfare is of such great magnitude for both (all) parties that continuing the course of events that gave rise to the mutual hurting stalemate (MHS) is unlikely. Viewed as a defining feature of ripeness, the MHS has become a popular idea because it is seen as critical for the policymaking of parties in the post-Cold War era who seek to mediate disputes in the international arena (Zartman, forthcoming). By examining the events that occurred at the time of stalemate, this study provides evidence that addresses the issue of timing as motivation to settle after escalation has occurred and few other options remain.

The usefulness of ripeness as a theoretical concept and a practical tool turns on the clarity of its indicators. Regarding clear indicators, Stephen Stedman notes: 'To improve

the usefulness of the concept, we need to bring more precision to it, so that ripeness becomes more than a tautology and subject to more rigorous definition than ... "I know it when I see it" ' (1991: 240). One objective indicator is a reversal in the military fortunes of the antagonists. The side previously winning is sobered into negotiation while the former underdog, being strengthened, will contemplate negotiation. This proposition specifies a relationship between changes in military strength or casualties (independent variable) and decisions to negotiate or to engage in related peaceful behavior (dependent variable). It can be evaluated by measuring changes in both the independent and dependent variables. By providing clear indicators of these variables – casualties suffered and conflict behavior shown – and by monitoring changes in them through time, this study provides an opportunity to evaluate the proposition.

The mediations prior to April 1993 occurred during periods of conflict but not warfare. The level of conflict during those periods fell far short of the violence and destruction wrought by the military offensives between April 1993 and February 1994. Although estimates of death and displacement vary, the difference (using any estimate) between the period prior to 1993 and the eleven months of fighting is compelling. A Human Rights Watch report issued in December 1994 estimated the combined deaths to be around 25,000 with close to a million refugees from both sides. Similar figures were presented by the US Congressional Research Service (Migdalovitz, 1994) and, more recently, by the US Institute of Peace (Carley, 1998). Using a well-known formula of three wounded for each fatality results in 1,800–2,400 injured Armenians and from 12,000–18,000 wounded Azerbaijanis, a ratio of

about one to six (Chorbajian et al., 1994; Human Rights Watch, 1994; MacFarlane and Minear, 1997). In addition to lives lost and people displaced by the conflict, the economy and social infrastructure of each country was virtually destroyed. MacFarlane and Minear (1997) describe the exceptionally harsh circumstances created for the citizens in each country by the combat. Yet, despite these conditions, neither side was able to coerce the other into surrender. Hence, by early 1994, the situation can be depicted as a mutually hurting stalemate.

But ripeness also involves perceptions of the situation. It is a perceptual concept with empirical referents; parties feel a mutual hurting stalemate but this feeling usually has a source in the reality of relations between the parties (Zartman, forthcoming). (See also Kleiboer, 1994 and Stedman, 1991, for similar arguments.) One would expect a link between the military equation and subjective appraisals of that equation. Without acknowledging the existence of a stalemate, the parties are unlikely to change their behavior from pursuing combat to peaceful relations. Indeed, this occurred in Zimbabwe when Ian Smith ignored the warnings of his military (Stedman, 1991). The proposition states that there is a relationship between changes in military strength or casualties and changes in perceptions in the costs incurred by those casualties. It can be evaluated by correlating military data with perceptions of the key actors.

The perceptions are associated with a recently avoided catastrophe or with an impending calamity. The crux of the matter is that the conflicting parties find themselves locked in a situation from which they cannot escalate and that the stalemate is painful to both, but not necessarily to an identical degree. It is significant to an understanding of the Nagorno-Karabakh conflict to realize that not all ripe moments are acted upon by mediators to the satisfaction of the conflicting parties, and that not all periods of calm result from ripeness. This dilemma confronted us with major questions that are paramount to understanding the full range of the Nagorno-Karabakh conflict: did the mediations occur at the right times? As a logical extension of this and related questions, the main hypotheses were formulated.

One purpose of the analysis is to evaluate the impacts of each of the mediations on the conflict. We are interested in learning about the extent to which the mediators contributed to reducing the conflict and bringing the parties to the negotiating table. Did the mediators create opportunities for settlement that were seized by the parties? Another purpose was to evaluate the impact of the intensified daily combat that took place between April 1993 and February 1994: did the combat lead the parties to regard their situation as MHS from which further escalation would not improve the situation or provide a way out? Did the stalemate lead to reduced violence and the ceasefire agreement? Was this a ripe moment for resolving the conflict peacefully?

The case provides an opportunity to evaluate competing hypotheses. One is that the mediators created opportunities for settlement by reducing the violence and bringing about the conditions for a ceasefire. The other hypothesis is that the offensives produced a mutually hurting stalemate that provided the condition for reduced violence and the ceasefire agreement. These contending hypotheses are evaluated with an events dataset assembled over a six-year period. The dataset is described along with coding and analysis procedures in the next section. Subsequently, the results are presented followed by a discussion of theoretical and practical implications.

Methods

In this section, the dataset and analysis procedures are described. First, incidents and events are defined. Second, the coding procedures are presented along with the software used for recording and storage. Subsequently, we discuss reliability and validity issues, concluding with a description of the time-series design.

Incidents and Events

We have compiled 1,675 incidents covering the period 1990–95, which constitute the database for the analysis. Within this set of incidents, there are 3,856 events. As an example, an incident consists of an agreement of the parties to attend a meeting, while an event is what the parties state at the meeting. If one party attended a meeting and the second refused, the former was scored positive for one event and the latter negative for another event. The incident was coded as a combined score for the events which it constituted. Thus, one incident may have more then one event. Because there are three parties to the conflict – Armenia, Azerbaijan, and Nagorno-Karabakh – one incident may have as many as three events at a given time. Thus, 1,675 incidents have 3,856 events spread across the six-year period under consideration. Each party was assigned a numerical value for each event according to the scale presented next.

Coding the Events

To measure the direction and intensity of an event, numerical weights were assigned. The scale ranges from +3 (most peaceful) to –3 (most violent). The direction of movement toward (positive) or away (negative) from peace or reduced conflict could be expressed in terms of either an ordinal or interval scale. This choice has implications primarily for the power of the statistical analysis designed to detect differences, for example, the difference between the power of the parametric *t*-test and its non-parametric counterpart, the Mann–Whitney *U*-test. Emphasizing power, we assume that our scale consists of equal-appearing intervals, which satisfies an assumption for using parametric tests. We did, however, also relax this assumption by treating the scale as ordered, to compare results obtained with a non-parametric test (see Siegel & Castellan, 1988, for more on this distinction).

The mean value of events per time period is the combined value of behaviors coded for each of the three parties. For example, a mean may include a release of prisoners by one party, gestures of conciliation made by another party, and a lack of activity (silence) by the third party. Taken together, these events would result in an incident score of plus 2 on the scale. The monthly averages of these incidents constituted the primary data used in the analyses. Events were coded according to the following definitions:

Plus 3 This score signifies a significant action toward peace. Examples are an actual signing of a ceasefire agreement (regardless of its durability); an actual exchange or release of prisoners, hostages, wounded, or sick; agreements to halt fighting in a particular region; or an event that includes intermingling of both parties such as a cultural event.

Plus 2 This score was assigned to events that consist of less dramatic actions. It may include agreements before a meeting takes place, movements of troops away from the battle zone, or gestures that could be construed as a peace feeler.

Plus 1 This score includes comments of a positive nature that indicate a willingness to cooperate or to work with the adversary to help reach a settlement, ceasefire, exchange of prisoners, humanitarian assistance. This score captures verbal

action only. It could involve an official making a statement that compliments the other side, that declares that violence should be ended, or that neither side can win a military confrontation nor that talks should begin. It includes such statements as 'both peoples share a common destiny and that they should work together', and similar attempts that could lead to a lessening of tensions and violence.[2]

Minus 1 This score includes threatening or derogatory comments about the other side, accusatory statements, remarks that mediation attempts are incompatible with their goals, or that a 'win' is essential – statements that denigrate negotiations and advocate violence or coercion.

Minus 2 This score includes threatening gestures such as movement of additional troops into the combat zone, bringing more war-fighting equipment onto the scene, welcoming mercenaries, not appearing at a scheduled peace talk, refusing to attend a recommended meeting, or moves of a negative nature that are short of actual violence.

Minus 3 This score includes any form of violence against the adversary, imposition of blockades or actual actions that directly or indirectly result in physical harm or are calculated to inflict harm of any nature to people, property or territory.

The values assigned to each event were recorded with a very brief narrative description in a Raosoft Computer matrix that kept track and isolated each one by day, month, and year.[3] To prevent 'biased' patterns from developing during the scoring processes, each event was typed, placed in, and then randomly drawn from a large depository prior to determining the numerical score. The program registered the value (plus or minus) assigned and stored the event for Armenia, Azerbaijan, and/or Nagorno-Karabakh. Raosoft was used in this study primarily for storage, organization, graphing, and recall.[4]

Coding Reliability

Since the determination of scaled values for each event was subjective, an evaluation was conducted to determine reliability of the judgements. Drawing randomly 200 events from the depository, each event was scored and registered in the Raosoft matrix. Identical events were coded independently by two graduate students following the same procedure using the Raosoft program. Examination of the results of the scores assigned by both coders revealed over 95% agreement or 190 out of the 200 events. This high agreement between the coders attests to the reliability of the coding system.

Validity of the Events Data

The reliability of the coding system used has little bearing on the accuracy of the reporting process of incidents. As with many international events datasets, gathering the information for this conflict was not a problem but ensuring the quality or validity of that information could be at issue. Recognizing these issues, we have taken steps

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[2] Zero scores would indicate no event. However, we were not certain whether an event took place for a particular party on a day for which no data were available. Furthermore, a score of '0' is computed in the software package as an event, therefore distorting valid analysis of the information in the databank. In other words, a '0' event would be recorded as an occurrence, without data on hand, distorting the statistics. In the study, it was important to analyze the events for which data were available.

[3] The Raosoft Survey software was used to collect the data electronically, to store the data in an orderly fashion so that any segment could be recalled as needed, and to produce tables, charts and graphs. For more information see Raosoft Survey (1991).

[4] The software is capable of eliminating duplication of events on any specific date and has the ability to perform various statistical analyses of the data. SPSS was used for statistical computations. Nevertheless, the Raosoft statistics were utilized as a check, to ensure that the SPSS statistics were reliable.

to ensure that the recorded data are of suffi-
cient quality to lend confidence to the infer-
ences made from the analyses reported in the
section below on results.

The observations in the dataset are only
those which were accessible. There is no way
to determine if all the information relevant
to each case and incident is included.
Accordingly, it should be accepted as a given
that the study has not considered every rel-
evant event, positive or negative, from
1990–95. By the same token, there is suffi-
cient data to detect, with a fair degree of
accuracy, the extent to which the contending
parties moved in a positive or negative direc-
tion prior and subsequent to the measuring
points selected for the analysis, namely the
various mediations and the April 1993 to
February 1994 warfare.

Most of the information that emanates
from news sources in Armenia and
Azerbaijan contain a degree of bias. As
examples, the Turan News Service
(Azerbaijan) and Noyan Tapan (Armenia)
usually find either the Armenians or
Azerbaijanis, respectively, to be the sole
aggressors and precursors of evil. Official
documents from government sources reflect
national objectives and goals. Information
from Russia normally reflects the bias of the
writers and information from Iran reinforces
the government's position to favor its own
needs at a particular juncture. Information
originating from Turkey consistently sup-
ports Azerbaijan.

With this in mind, reports of incidents
were cross-referenced to validate that an
incident (positive and/or negative) did
occur. At least two sources were checked for
almost all of the recorded incidents. In
addition, the senior author witnessed some
incidents directly, thereby needing no con-
firmation from other sources. However,
when on the receiving end of artillery fire on
the Armenian border or in Nagorno-
Karabakh, there was no independent way of

verifying if the incoming artillery was a reac-
tion to an Armenian instigation or the
initiation of an Azerbaijani aggressive move.[5]

A Time-Series Design

Determining whether or not a significant
change in behavior occurred before and
after each mediation and the period of
intensified warfare between April 1993 and
February 1994 requires evaluating the
behavior over a period of time to determine
whether or not the data reflect significant
shifts in events or behavior (see Frei &
Ruloff, 1989). Each of the mediations and
the intensified warfare is effectively a 'treat-
ment' in a quasi-experimental design. Each
is an intervention intended to influence the
course of the conflict. Hence, analysis of
events six months before and after each
'treatment' provides an indication of its
impact on the subsequent behavior of the
parties.

Since the goal of mediation is to establish
peace between conflicting parties, a positive
impact of the mediations should result in a
significant lessening of violent behavior on
both sides. Conversely, continued violence
suggests that the mediation techniques may
not have achieved their goal. The same cri-
teria apply to the intensified warfare. The
evaluation of events six months before and
after the formal combat commenced would
be indicative of the influence of the sus-
tained violence on the warring parties. The
choice of a six-month period for evaluating
the effects of both the mediations and the
offensives was intended to ensure that the
overlap between interventions would be kept
to a minimum. A sensitivity analysis
designed to ascertain whether lengthening or
shortening the before-and-after periods
would affect the results showed that it made

[5] The goals of the study do not require identifying the ini-
tiator of an event, even if that could be accomplished
beyond doubt. The significance lies in the fact that, at
various points in time, something did indeed happen.

little difference; the differences in the sizes of the before-to-after comparisons of coded events were negligible for various alternative period lengths.

Before being able to utilize a time-series sequence with confidence, a method of organizing the more than 3,800 events – between 1990 and 1995 – in the dataset had to be established. The breakdown of events for each party is as follows: Armenia, 1,169 events; Azerbaijan, 1,478 events; Nagorno-Karabakh, 1,209 events; and, Armenia and Nagorno-Karabakh combined, 2,378 events. Approximately three-quarters of the events in each dataset were coded as −3: 74% , 74%, and 76% for Armenia, Azerbaijan, and Nagorno-Karabakh, respectively. Approximately 15% of the events in each dataset was coded in a positive direction as either +1, +2, or +3. These data provide a good indication of the general situation and the direction of the adversaries' behavior from 1990–95.

The percentages of the scores are even more noteworthy, and a stronger sense of the negative activity is revealed when a composite of the three parties is examined. The data show that of 3,856 events, 2,881 were −3s, 240 −2s, and 179 −1s. Close to 86% of the 3,856 events for the three parties fell within the minus range and, within the minuses, 87% were in the −3 category.

Working with 3,856 events in a time-series sequence is cumbersome. For the purposes of this research, it is appropriate to derive an indication of the central tendency of the conflicting parties. Based on our assumption of equally appearing intervals (see discussion above), we computed mean values of the coded events by month for the six-year period. Differences between the means were evaluated with significance tests presented in the next section.

This analysis is intended to evaluate and compare the impacts of particular events on the incidence of violent or peaceful behavior

over time. We are interested in changes that may have occurred as a function of those events. We are less interested in the shapes of trends (short or long-term cycles), in the relation between current and past events per se (autoregression), or in forecasting future states of the conflict (extrapolating trends). (See Frei & Ruloff, 1989, ch. 34, and Ostrom, 1979, for discussions concerning these statistical approaches.) Thus, we adopt an experimental rather than a modeling or regression approach to analysis. Regarding the interventions as treatments (independent variables), we compare the conflicting parties' behavior from before to after the treatments. The dataset then consists of dependent variables evaluated in a sequence of before-and-after, quasi-experimental designs without control groups (see Cook & Campbell, 1979). As treatments, we do not include either the mediators' behavior or combat casualties during the period of the offensives in the events dataset. Significance tests are used to assess the changes from before to after an intervention (mediation, offensive) in a manner similar to the way data would be analyzed from a laboratory experiment where control groups could also be included in the design.

Results

In this section, we present the results of the analyses. First, data on casualties suffered and refugees created during the course of the conflict demonstrate the impact of the offensives. Second, the complete time-series of coded events is plotted by monthly averages over the course of the conflict period. Third, impacts of the mediations on conflict behavior are presented. Finally, the impact of the period of intensified combat on conflict behavior is demonstrated.

Casualties by Time Period
The combined deaths for the five-year

period prior to the offensives are estimated at
approximately 10,000 or an average of 2,000
per year (Chorbajian, 1994: 2; Human
Rights Watch, 1994: 48; Migdalovitz, 1994;
Mooradian, 1996: 419). The average yearly
total for this period was approximately
equivalent to the monthly total casualties for
the period of the offensives. The number of
casualties dropped dramatically after
February 1994 when the ceasefire was nego-
tiated; practically no casualties have occurred
from that time to the present. The trends of
combined casualties per year from 1988 to
the present are shown in Figure 1. (Although
casualties varied from year to year, the devi-
ations around the average figure of 2,000
were relatively small.)

The offensives also took a toll on the
civilian populations. The attacking side
chased the local civilians from their homes,
usually without regard for their human
rights (Human Rights Watch, 1995).
Approximately half a million Azerbaijani
refugees were created as a result of the

Armenian offensive on Kelbazar in April
1993. Because most Armenians had already
been driven from their homes in Azerbaijan
and Nagorno-Karabakh by this time, there
were fewer new Armenian refugees created
by the offensives: the fighting was largely
concentrated in areas where few Armenians
lived. Cumulative average yearly numbers of
refugees are shown in Figure 2.

Means by Time Period

A scatter-plot of the monthly means of the
indexed value of events from 1990–95 is
depicted in Figure 3. The scatter-plot pro-
vides an immediate graphic snapshot of
events for six years (shown along a yearly
time-line). Between 1990 and 1995, 72
plots have been constructed. It is evident
that an overwhelming number of points for
the three parties fall well below '0' or the sep-
aration line between pluses and the minuses.
Only ten of 72 means are at or above '0' – or
approximately 8%. Ninety-two percent of
the points are on the minus side. Further, it

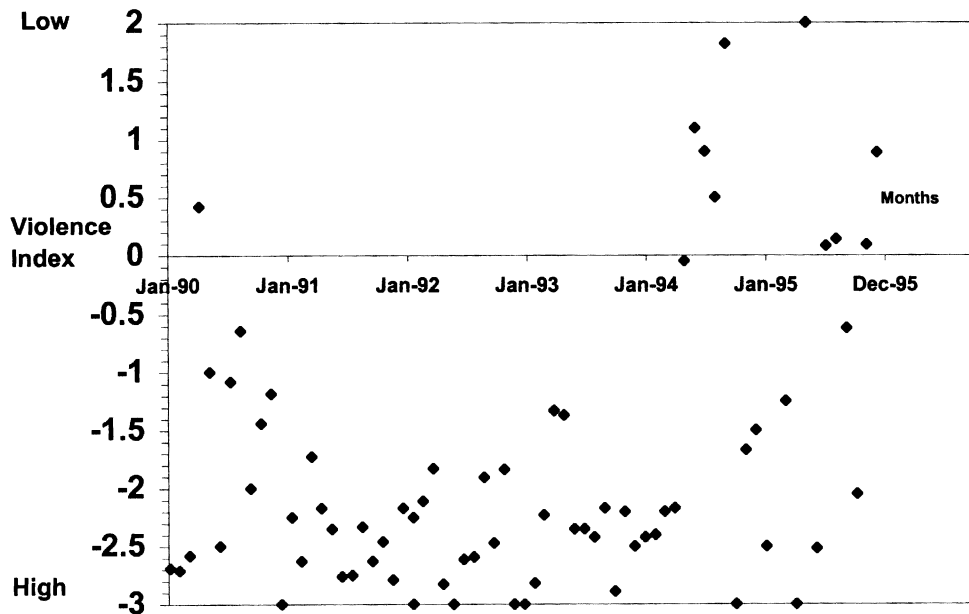Figure 1.   Average Yearly Deaths, 1988–98
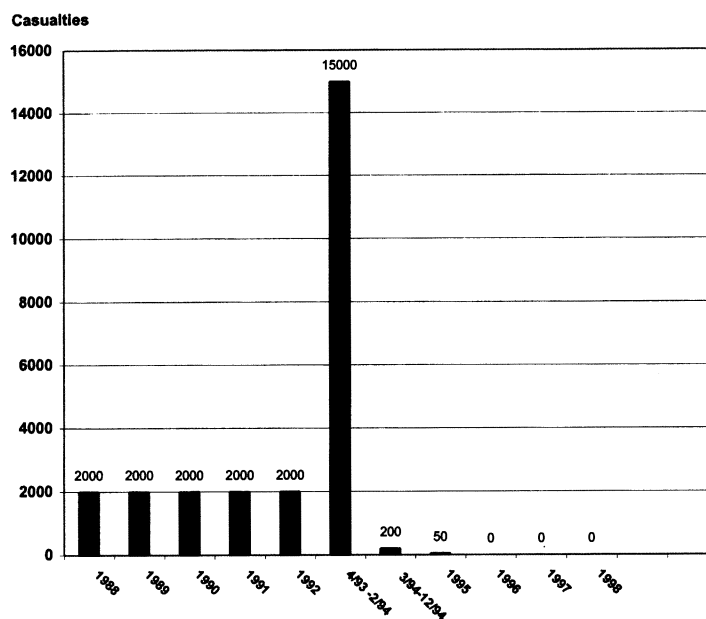
See text for sources.

Figure 2. Cumulative Average Yearly Refugee Totals, 1988–98 (in Thousands)
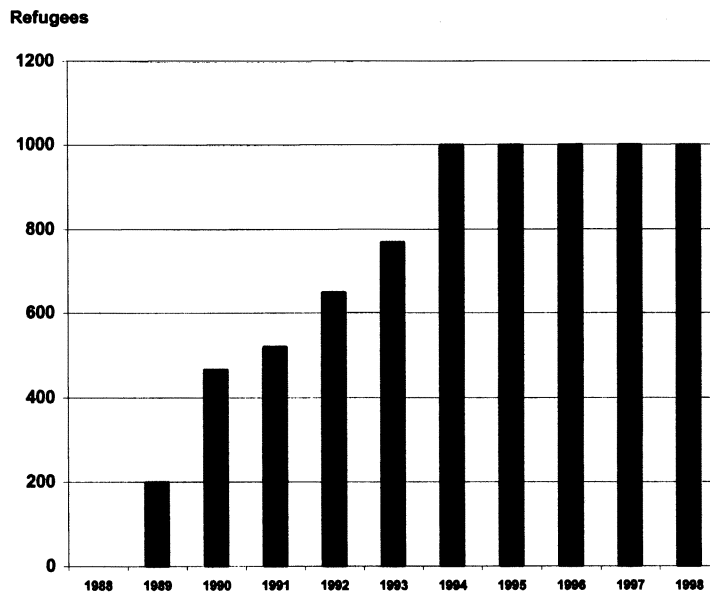
Computed using data obtained from Human Rights Watch (1994, 1995); Azerbaijan International (Spring 1998: 87)

Figure 3. Mean Value of Events by Month, 1990–95

is evident that a dense clustering above or at the plus point has occurred toward the summer months of 1994 and beyond or at approximately the 50th month and after.

The shift from a preponderance of minus to plus points on the scatter-plot constitutes an alert that something occurred to cause the change. Analysis shows that the changes coincide with the aftermath of the April 1993 to February 1994 intensive warfare. During May 1994, the unofficial ceasefire took effect; in July 1994, the unofficial ceasefire received the signatures of the warring parties and members of the CSCE, and in August 1994, Presidents Aliyev and Ter Petrossian agreed to extend the ceasefire.

Focusing specifically on the interventions, we ask whether any one or combination of these attempts to mediate the conflict produced a shift in the parties' behavior. Focusing then on the period of intensive combat, we ask whether this caused the parties to change their behavior.

The two types of analyses enable us to ascertain whether a de-escalation (mediation) or escalation (offensives) strategy is more effective in reducing conflict or in bringing the parties to the negotiating table.

Impacts of the Mediations

Using the mean monthly scores, the behavior patterns of the parties six months before and six months after each mediation were compared. The *t*-test was used to compare the two sample means. The results of the tests for each of the six mediations were very similar. Consequently, only one of the six mediation analyses is illustrated as an example: the Yeltsin–Nazarbayev (Y–N) mediation of September 1991.

Figure 4 shows that the means for the three parties remained in the minus range during the months of the examined periods. The six months subsequent to the Y–N mediation indicate a slight increase in the violence – the opposite of what one may

Figure 4. The Means of Events Six Months Before and After the Y–N Mediation
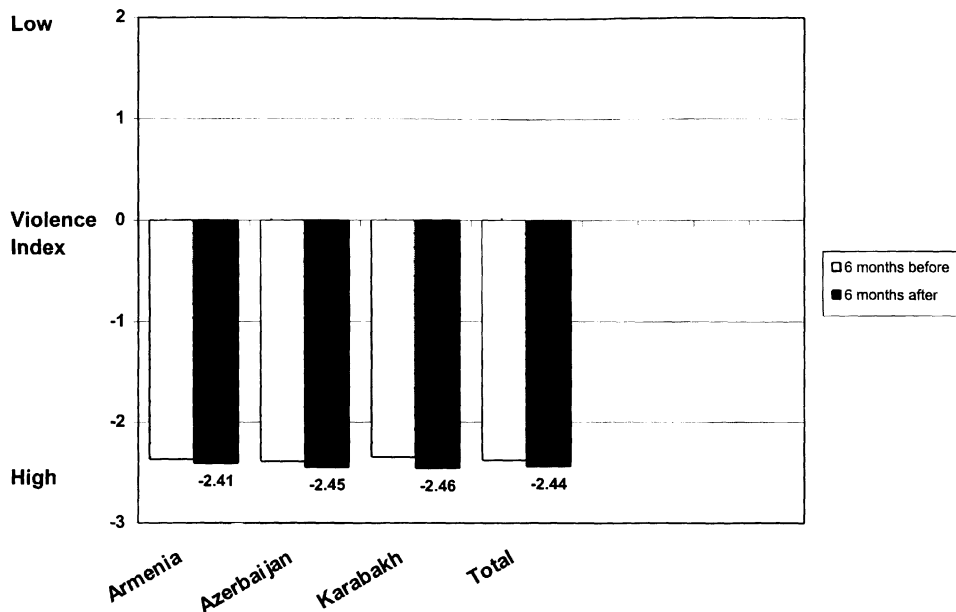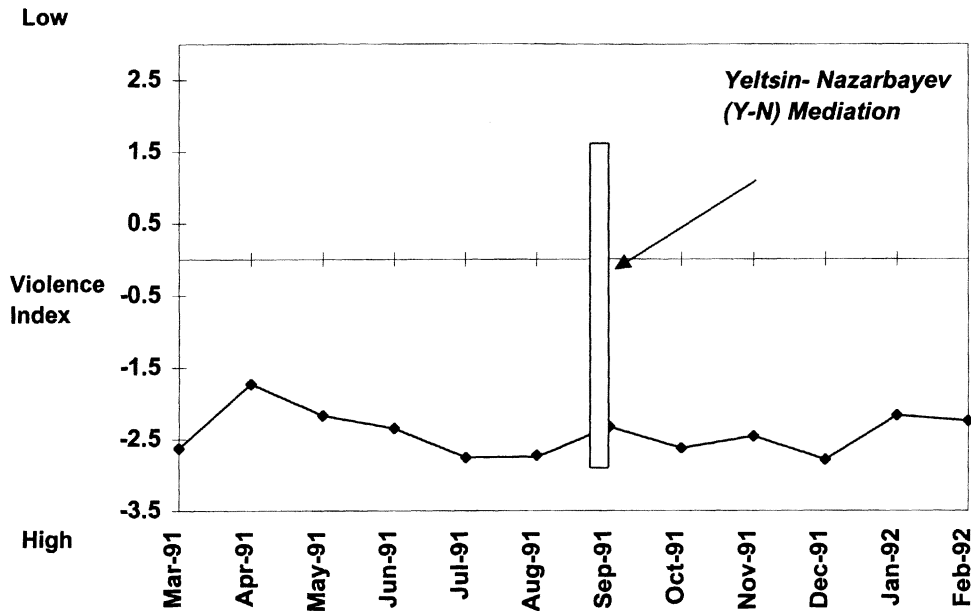
Figure 5. Trends by Month Before and After the Y–N Mediation

anticipate from effective mediation techniques. Figure 5 shows the month-by-month trends during the same 12-month period.

The number of events pertinent to the periods under consideration for the Y–N mediation was 410 before and 479 after. The difference between the before (–2.38) and after (–2.43) means is 0.05, t (887 d.f.) = 0.68, $p > 0.49$, which is not significant. Thus, as a consequence, the null hypothesis is not rejected. The Y–N mediation, similar to each of the other five mediations, had no impact on the behaviors of the parties.

For example, the Russian mediation began in earnest in July 1993, three months after the beginnings of the intensified warfare. The Russians had concluded that the CSCE process was not making any progress. Armenia, Azerbaijan, and the Nagorno-Karabakh Armenians had also become dissatisfied with the CSCE process (Hunter, 1994: 102). Even with Russia's special envoy Kazimirov shuttling between all of the parties, the warfare intensified. In the midst of the shuttle diplomacy, President Aliyev of Azerbaijan assured

his citizens that in 1994 'we will liberate our territories' (Turan News Agency, 3 January 1994: 1). While the Azeri forces made initial gains in a counterattack that began in December 1993, by the middle of February 1994, the Armenian forces had restored the forward edge of the battlefield as it was prior to the Azerbaijan offensive (Mooradian, 1996: 418). The before (–2.25) to after (–2.35) comparison shows that violence increased somewhat during this period. The difference of 0.10 does not approach statistical significance, t (1468 d.f.) = 1.10, $p < 0.27$. Thus, like the other mediations, the Russian effort did not reduce the violent behavior of the conflicting parties.

Impact of the 1993–94 Intensive Combat
The above analysis of the before-and-after periods does not include the intensive warfare period which occurred between April 1993 and February 1994. The intent of this before-and-after analysis is to ascertain whether the violence influenced the parties' behaviors. The 'treatment' in this analysis is violence itself and the aim is to

determine if it affected the after behavior of the parties. Events coding was not performed for the period from March 1993 to February 1994. This was the period of intensive combat, considered by us to be the independent variable. Thus, we are interested in calculating the change in behavior from before (up to March 1993) to after (from February 1994) as a function of the intensified combat per se. If, during the mediation periods, there continues to be war, as we discovered and reported above, it would indicate that the efforts were ineffective.

Figure 6 shows a dramatic difference between the before-and-after periods for each party. Figure 7 shows the combined parties' trend from before to after the offensives. After February 1994, each month exhibited relatively few violent incidents. The difference between the means from before (−2.42) to after (−.58) the intensified warfare is highly significant, t (460 d.f.) = 9.16, $p < 0.0001$. Thus, the warfare was instrumental in changing the behavior of the parties.

Leader's Perceptions

The parties must recognize when an opportunity occurs for negotiating their way out of a painful situation. Mediators can make parties aware of these opportunities. However, in this case, the analyses show that the offensives, not the mediations, provided the impetus for negotiation. These findings are consistent with the perceptions of key leaders on both sides.

The senior author conducted interviews with leaders of the parties who attended the July 1994 ceasefire ceremony in Yerevan. This was an opportunity sample used for corroboration rather than confirmation of our time-series analyses. Each of the 15 leaders was asked: (1) How effective have the mediators been in convincing you that this conflict can and should be resolved through negotiation? (2) What role has the warfare from April 1993 to the present played in convincing you to agree to this ceasefire?

All the interviewees agreed that the parties came to the table because of losses suffered in

Figure 6.   The Means of Events Six Months Before and After the 1993–94 Offensives
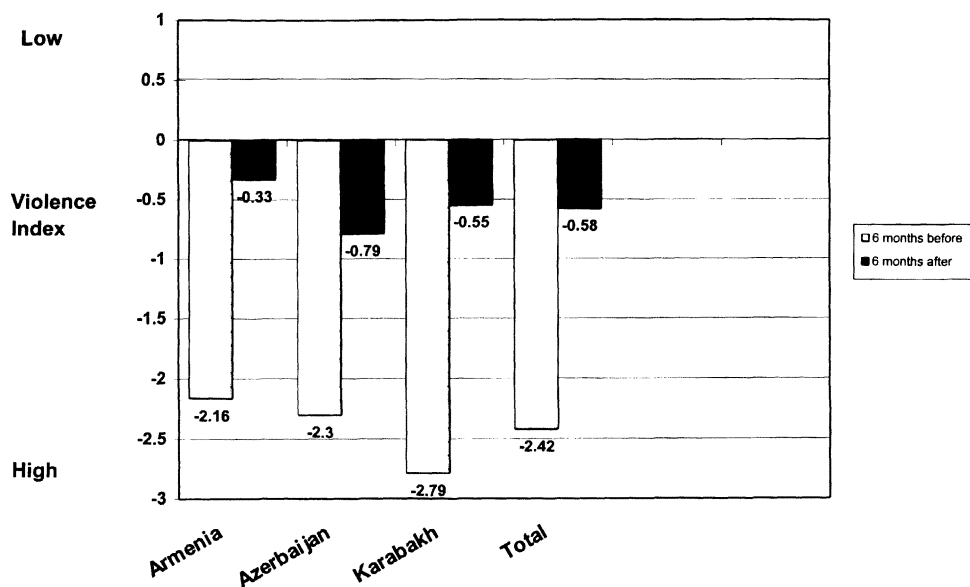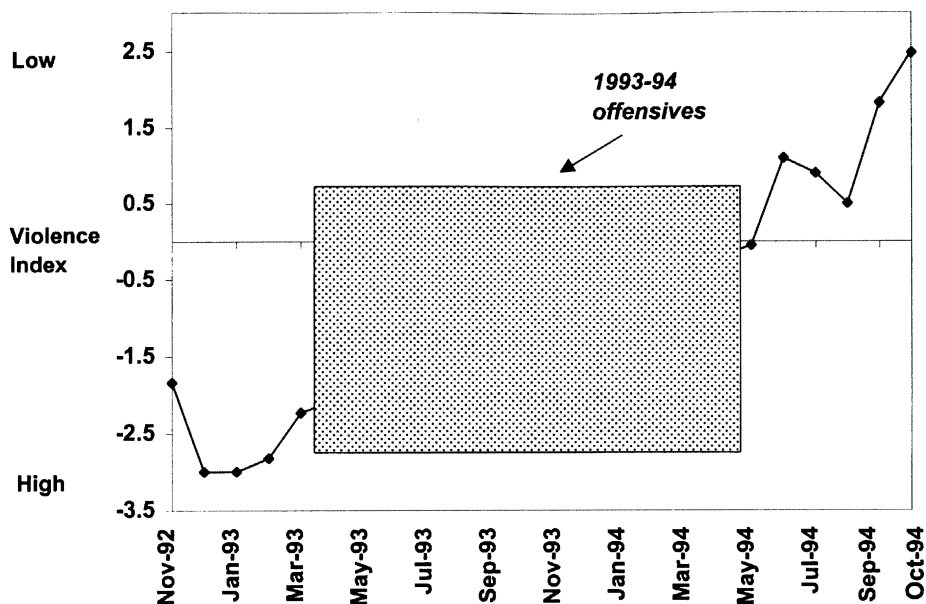
Figure 7. Trends by Month Before and After the 1993–94 Offensives

the offensives (question 2), not because of the mediators' persuasive efforts (question 1). Elaborating further, one representative stated that the mediators, and particularly the Russian mediators, intervened to satisfy their own agendas and that Armenians and Azerbaijanis should talk their problems through in order to return to 'the friendly neighborly relations that they had before the conflict began'. He said that both sides had suffered harm that may not be rectified for many years. A high-level Russian leader maintained that it often requires 'bleeding' for nations at war to realize that killing only generates more violence. In such cases, ideas offered by a mediator may be useless until there is little blood left to be spilled. He thought that the warring parties had reached that stage. A Karabakh Armenian said that they had suffered greatly but that freedom is worth the severe price that was paid. He added that outside parties do not understand the depth of the issues between the warring parties and, thus, had no basis for solving the conflict. Another diplomat argued that while the mediators talked more lives were lost.

The leaders interviewed came to realize that they could not depend on the mediators for achieving progress toward ending the conflict. Azerbaijan's President Aliyev noted that he had expected more productive interactions between representatives of the conflicting parties and the mediators. He complained that progress was much too slow (see also Snark News Service – Armenian, 25 September, 1995). Robert Kocharian, the current President of Armenia, but the President of Nagorno-Karabakh during a 1994 interview in Stepanakert (capital of Nagorno-Karabakh), told the senior author that he had lost faith in the mediation process. His observation was typical of those reported in our interviews with officials on both sides. Having lost hope in the mediations as casualties on both sides were mounting, the leaders realized that any progress toward a ceasefire would depend on their own informal initiatives.

The former Armenian Deputy Foreign Minister, Jirair Libaridian, said that the 1994 ceasefire agreement was achieved without the assistance of any of the media-

tors. He noted that it was negotiated during secret personal contacts between high-level representatives on both sides. According to Mr Libaridian, the agreement resulted directly from the exhaustion of warfare. Special envoy Kazimirov of Russia's mediation team agreed in an interview with a different source '… people are tired of the cruel confrontation …' (Armenian Weekly, 6–13 August 1994: 1).[6]

Discussion

The results show that the parties did not reduce their violent behavior until the early months of 1994. Third-party techniques were not effective prior to the period of intense combat. It appears that the impetus for change came from the toll taken on all sides from losses suffered in that combat. With regard to our two hypotheses, the first is refuted and the second is supported. The mediators did not create opportunities for settlement by reducing the violence and bringing about the conditions for a ceasefire (first hypothesis). On the other hand, the offensives did provide the condition for reduced violence and the ceasefire agreement (second hypothesis). In this case, de-escalation was preceded by escalation to the point of a MHS. In this section, some possible reasons for this outcome are discussed in the context of theoretical and practical contributions made by the study.

It is of interest to ask why the mediators were unable to identify opportunities for settlement before the conflict escalated. Ripeness theory emphasizes the importance of mutually perceived ways out of costly conflict situations. It can be argued that the conflict over Nagorno-Karabakh prior to the offensives was not viewed by the parties as

being sufficiently costly to encourage them to seek a way out through a mediated settlement. When the costs increased, the parties found a way out by negotiating a settlement without the help of mediators. The evidence is quite clear on this point. Less clear, however, is why they preferred to endure rather than prevent continued violence. This is a question of the parties' motivation for sustaining the conflict.

One way of addressing this question is by examining the parties' orientations toward conflict. Orientation has been found to be a strong influence on bargaining behavior. Significantly more deadlocks occurred among bargaining dyads who viewed the conflict as a competition than among those who viewed it as a problem to be solved: This variable produced the strongest effect size (across nine studies) among the ten variables evaluated in a meta-analysis of bargaining studies (Druckman, 1994). Interviews conducted by the senior author suggest that each party was unified in seeking to achieve its goal through victory on the battlefield rather than through accommodations made at the negotiating table. Until early 1994, each party perceived a competitive advantage that sustained its pursuit of military victory. Similar to the results of the bargaining experiments, this orientation produced and sustained the deadlock. It also hindered the mediators' efforts to find opportunities for settlement before further escalation. As such, parties' orientation toward the conflict contributes to ripeness. Mediator's opportunities to bring the parties to the table are enhanced when the parties view the conflict as a problem to be solved – and are, thus, ready to settle – rather than as a battle to be won, and are, thus, ready to fight.

The settlement achieved in 1994 has not led to a resolution of the issues that divide the parties. The battlefield calm following the ceasefire has not provided an opportunity to address those issues in negotiating

[6] In a recent revelation, Vafa Guluzade, adviser to Azerbaijan's President Aliyev, stated that he and Jirair Libaridian 'side-stepped' Russia. Vladimir Kazimirov was pressing for an enlarged Russian role in the ceasefire agreement. (Noyan Tapan News Service, 14 March 1999).

fora. Rather than to bring the parties together, the agreement has served to separate them. The hurting stalemate created a sense of urgency to settle. No comparable event has created a desire to seek a resolution. Relatively stable political situations in both countries combined with improving economies, especially in Azerbaijan due to its oil reserves, has reduced the attractiveness of various proposed alternatives to the staus quo. (For example, the OSCE proposal on the integrity on national borders at the 1996 Lisbon Summit was rejected; see Mooradian, 1998 for details.) Thus, parties who, because of the costs of combat, are motivated to settle may, because of a lack of comparable incentives, not be motivated to resolve their differences. A challenge for third parties, then, is to create the sense of urgency needed to move beyond the terms of disengagement to a lasting peace. How to create that 'sense' continues to elude the mediators involved in the Nagorno-Karabakh conflict.

These findings make several contributions to an evolving theory of ripeness. One consists of providing a clear empirical indicator of the concept. By tracking changes in the magnitude of combat casualties on both sides, we were able to assess the costs incurred by the parties. Through interviews with leaders, we were able to corroborate our judgement that a hurting stalemate existed at the time of the ceasefire talks. By bringing more precision to the concept, this study has improved its usefulness. (Note in this regard Stedman's [1991] call for more precise definitions.) But, the analysis contributes more than an indicator of ripeness. It demonstrated the relative impact of the hurting stalemate on getting the parties to the negotiating table. By treating the time-series events data in a quasi-experimental design, we were able to compare the effects of the hurting stalemate with the effects of several attempts at mediation. The results confirm the escalation hypothesis (intervene after escalation occurs) and disconfirm the de-escalation hypothesis (intervene before escalation occurs). The clarity of these results militates against alternative explanations, bolstering the internal validity of the analyses. Furthermore, going beyond the experimental comparison, we offered an explanation for the failed mediations. Opportunities for settlement are difficult to discover when the parties are committed to the belief that victory is attainable. Referred to as 'orientation', this may be an important influence on the parties' subjective evaluation of the situation and a key factor in mediators' attempts to identify ripe moments.

Opportunities for making progress toward a settlement are precluded when the parties are committed to winning on the battlefield. Opportunities are presented when each party is divided internally on goals or means for pursuing the conflict (hardliners and softliners: see Stedman, 1991), when the leadership is challenged or changes (Stedman, 1991), or when the incumbent regime suffers losses in legitimacy (Druckman & Green, 1986). These are some of the variables hypothesized to influence the mediator's chances to get the parties to the negotiating table (Zartman, forthcoming). They can also be regarded as a set of conditions which, together, move a conflict process toward or away from settlement.

Internal divisions provide moderate factions (softliners) that can draw their more extreme compatriots (hardliners) closer to the center, away from a 'victory at all costs' orientation. The military organizations on both sides of the Nagorno-Karabakh conflict were internally cohesive during the six-year period analyzed in this study. A new regime can be released from commitments by its predecessors. Although there were some leadership changes during this period in Azerbaijan, each successive regime adhered

to the same policies and viewed the 'enemy' in the same ways. Changes in public opinion about a regime's legitimacy can destabilize the leadership and jeopardize its policy initiatives. Public opinion on both sides was relatively stable in support of their leadership's approach to pursuing the conflict during the period leading up to and through the offensives. In fact, the public may have been even more hardline than the leadership. Note in this regard the pressures put on the Armenian president Ter Petrossian to resign when he attempted to reach a compromise agreement; he was succeeded by the more hardline Robert Kocharian. Similarly, Azerbaijan President Elchibey did not deliver on his promise to drive the Armenians from Nagorno-Karabakh; he was succeeded by President Aliyev. Thus, in this case, few opportunities were provided to the mediators to move the process toward a settlement of the conflict. More broadly, these are the kinds of variables that can be used to diagnose situations and to evaluate timing for taking initiatives in a comparative case-study research context.

An implication of these results is that timing for conflict settlement depends on raising the level of conflict until a stalemate is reached and then begins to hurt. This is a sobering conclusion. It suggests that settlement depends more on the 'push' of a hurting stalemate than on the 'pull' of an anticipated attractive outcome. Unfortunately, as Zartman (forthcoming) points out, there are only a few examples of international conflicts that were settled before the conflict escalated, usually to the point where the parties' costs were perceived to outweigh any benefits from further fighting. The challenge then, is to identify conditions where parties perceive more benefits and fewer costs from avoiding than pursuing conflict (Patchen, 1998). To be effective, a mediator must persuade the parties that either they can win more cheaply than by fighting or

create an optimistic vision of the future which may include acceptable power-sharing arrangements (Mitchell, 1995; see also Druckman, 1986, for a discussion of how Lord Carrington used the tactic in the Rhodesia–Zimbabwe talks at Lancaster House in London). Another opportunity occurs when the issues giving rise to the conflict fade in importance or when the parties simply lose interest (Mitchell, 1995). Unfortunately, none of the six mediation efforts in this case was effective in creating credible visions of the future. Nor did they alter the perceived importance of the issues at stake. Their ineffectiveness was due, at least partly, to the absence of the facilitating conditions discussed above, namely, internal divisions within the militaries, leader succession and accompanying policy changes, and reduced legitimacy for hardline regimes.

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