

Kosovo Refugees on the Macedonian Border: Escaping a Prisoners' Dilemma¹

John H.P. Williams

Department of Political Science
East Carolina University
Brewster A-120
Greenville, NC 27858
williamsjoh@mail.ecu.edu

Lester A. Zeager

Department of Economics
East Carolina University
Brewster A-434
Greenville, NC 27858
zeagerl@mail.ecu.edu

April 28, 2004

Abstract

The 1999 Kosovo crisis generated more than 800,000 refugees, the majority of whom fled into either Albania or Macedonia. While Albanians welcomed their ethnic kin, Macedonia closed its border three times. We provide a game-theoretic perspective on strategic interactions between Macedonia and NATO. We rely on narrative accounts of the crisis to eliminate many configurations of payoffs. From the remaining configurations, the theory of moves isolates one game that satisfies the necessary conditions for credible threats – a prisoners' dilemma. Credible threats of border closings in a prisoners' dilemma alter donor incentives and lead to international sharing of asylum burdens in repeated play.

¹ A longer version of this paper (Williams and Zeager 2004), forthcoming in *Conflict Management and Peace Science*, gives more attention to the context for the Kosovo crisis and contrasts the responses of Macedonia and Albania to the Kosovo refugees. The authors thank Steven Brams, Glenn Palmer, and two anonymous referees for valuable comments and suggestions on the longer version. We retain full responsibility for any remaining errors or other shortcomings of the analysis.

For years the case of 'burden sharing' has been argued in humanitarian meetings but countries of asylum wishing donors to share the asylum, not just the financial burdens, have had little leverage in the past. (Morris 1999, 19)

1. Introduction

During the flight of ethnic Albanians across the Kosovo-Macedonian border in 1998-99, Macedonia restricted asylum on three occasions, leaving refugees trapped on its border. Descriptive accounts of these events deal with many issues, but do not investigate the strategic interaction displayed in the border closings in depth. The border closings are viewed, understandably, as failures of commitment to refugee asylum, though observers differ as to how to assign blame. Amnesty International (1999) accuses Macedonia of "playing politics" with the refugees, while a report prepared for the UN High Commissioner for Refugees (Surkhe, et al. 2000, 6) says Macedonia "panicked" when the number of refugees became far greater than anyone had anticipated.

In this paper we offer an interpretation of Macedonian behavior that is theoretically grounded. We apply the theory of moves (TOM), a game-theoretic framework proposed by Brams (1994), because it allows us to identify necessary conditions for a credible threat in 2x2 games. TOM is fitted to the needs of applied researchers (Gilboa 1995) and has provided useful insights into strategic behavior in other refugee crises (Zeager and Bascom 1996; Zeager 2002, 2004).²

We argue that border closings by Macedonia were deterrent threats in a prisoners' dilemma game in the repeated play context of the Balkans. Macedonia demonstrated that it had the leverage (and willingness) to force a mutually undesirable outcome — abandoning the refugees to an uncertain fate. Once this threat became credible and NATO realized that refugee asylum in Macedonia was conditional on asylum assistance, it proposed a humanitarian evacuation program that moved more than 90,000 refugees from Macedonia. Our analysis shows how the strategic interaction led to this outcome and how the players avoided a prisoners' dilemma.

The problem Macedonia confronted is not unique in contemporary refugee crisis management. Most refugees flee from a developing country into neighboring developing countries. Developed countries now grant few resettlement slots, so most refugees remain in countries which lack the economic capacity to help. Given the greater strength of NATO, how was Macedonia able to exert influence? By considering the configuration of payoffs for Macedonia and NATO, we try to explain how Macedonia had leverage to elicit international burden sharing.³

The next section gives a brief account of the events in Kosovo, providing context for the model we develop. We then seek to impose reasonable assumptions on the preferences of the players to restrict the payoff configurations for the strategic game. After deriving the necessary conditions for a credible threat, we identify the payoff configuration that best fits the situation at the Macedonian border and derive its implications. Using a threat power analysis, we can reinterpret the events on the Macedonian border and explain how a cooperative outcome was achieved. The final section offers concluding remarks and suggestions for future research along these lines.

2. Background

To provide context for the game-theoretic modeling, we briefly describe the events associated with the refugee flight. More detailed descriptions of the Kosovo crisis are available elsewhere (Minnear 2000; Daalder and O'Hanlon 2000).

In 1997, violence between separatist ethnic Albanians and government troops in the Serbian province of Kosovo began driving refugees into Macedonia and Albania. Reacting to the developments in Kosovo, the OSCE and NATO used military demonstrations and negotiations to pressure Serbia to stand down from conflict. Efforts to reach agreements by the UN in October 1998 and by the OSCE at Rambouillet in February 1999 also failed. NATO countries were concerned about the alleged human rights violations and feared that a failure to act would at the very least damage their credibility,⁴ and at worst allow severe human rights violations to expand unchecked. From within the OSCE, NATO countries decided to force compliance, but other key OSCE countries refused to go along. Despite disputes concerning the legality of the operations (Roberts in Surkhe, et al. 2000) and differing opinions about the potential scope of the operations, NATO began the bombing campaign in March 1999 and continued it for several

² Brams and Togman (1998) also use threat power analysis in TOM to understand the role of threats in reaching a cooperative solution to the Northern Ireland conflict.

³ Two sources (UNHCR 2000, 234; del Mundo and Wilkerson 1999, 19) attribute this leverage to NATO's need for consent to operate in Macedonia. Yet, Albania could not exercise this same leverage (Williams and Zeager 2004).

months. By May, as NATO planners considered a major ground assault, Serbia capitulated and accepted the Rambouillet Agreement in June after key provisions had been removed.

3. Model Specification

This section identifies the actors that qualify as players in the Kosovo refugee negotiation game and ascertains their goals in the negotiations. These goals limit the possible configurations of payoffs to a manageable subset of games. Later, we will ask whether any game in this subset is compatible with threats by Macedonia to withhold asylum from Kosovo refugees when they arrived in large numbers at its border.

Three broad categories of actors helped manage the refugees on the Macedonian border: Macedonia as a potential first asylum country, NATO countries taking military action against Serbia, and organizations specializing in assisting refugees. The third group included the UNHCR and non-governmental organizations operating under UN auspices. In the Kosovo crisis, military and humanitarian roles became blurred, denying the UNHCR its usual neutral role (UNHCR 2000, 115). We rely on Hamburger's (1979, 3) rule for identifying relevant players in a game, "A bona fide player is one who cares about what happens *and* can do something about it" (*italics in original*). The assistance providers clearly had preferences about policy choices, but had little leverage for influencing decisions by NATO or Macedonia. The NATO support units were ready to take action — with or without the UNHCR — and the latter reluctantly acknowledged that cooperation with NATO was the only way to help the refugees. Therefore, we do not treat the assistance providers as players in the negotiations, even though they played an important role in helping the refugees. Similarly, we do not treat the refugees as players in the negotiations.⁵

The discussions between NATO and Macedonia no doubt involved issues other than refugees, including Macedonian membership in NATO or the European Union (EU), ongoing relations with Greece and other neighbors, and the difficulties of mounting a ground operation into Kosovo, if necessary. Yet the *immediate* concern for both sides — which had to be resolved before taking up other issues — was that a great many refugees were trapped on the Macedonian border. Based upon our reading of the narrative literature on these crises, we seek to represent the preferences of Macedonia and NATO with respect to asylum and assistance for the refugees.

With refugees massing at its border, Macedonia faced two alternatives: permit asylum (P) for the refugees or withhold asylum (W). It was concerned that some of the refugees were armed and might disrupt its delicate ethnic balance — Serbs, Albanians, Turks, and others. It would also be very expensive to build camps to maintain and control the refugees. Therefore, Macedonia preferred to withhold asylum from the refugees rather than grant asylum.

The timing of the refugee flight (during the NATO bombing campaign expressly undertaken on behalf of ethnic Albanians) led to a presumption of NATO responsibility for the refugees, so withholding assistance was not a viable option (UNHCR 2000, 234-5). Yet, NATO still had two choices: provide financial assistance only (F) or include asylum assistance (A). Financial assistance would involve construction and management of refugee camps and provision of bilateral aid to the asylum country. Asylum assistance would involve evacuation or resettlement of refugees to NATO or other countries in addition to the financial assistance. As asylum assistance would involve considerable additional expenses, our analysis assumes that NATO preferred to provide only financial assistance.

We must also specify the preferences of each player with regard to the decision controlled by the other player. Macedonia preferred that NATO provide asylum rather than purely financial assistance, because of the enormous challenge of accommodating such a large number of refugees on short notice. NATO preferred that Macedonia permit asylum rather than withhold it, because asylum in Macedonia would be the simplest and least expensive solution to the refugee problem. The broader international community shared NATO's preference, because it feared that "humanitarian evacuation could undermine the principle of first asylum" (UNHCR 2000, 283), which would set a precedent absolving asylum countries of their responsibility for refugees.⁶

A game with two players, each facing two possible strategies, yields four possible outcomes, which are shown in the generic payoff matrix in Figure 2. To analyze threats in TOM, rank orderings of outcomes are required for each player. Macedonia prefers to withhold rather than permit asylum, so we have

$$x_{21} > x_{11} \quad \text{and} \quad x_{22} > x_{12}. \tag{1}$$

Moreover, Macedonia prefers that NATO provide asylum rather than only financial assistance, so it follows that

$$x_{11} > x_{12} \quad \text{and} \quad x_{21} > x_{22}. \tag{2}$$

On the other hand, NATO prefers to avoid asylum assistance, so we have

⁵ The theory of moves can accommodate more than two players, e.g., Zeager (1998), but it then sacrifices the capacity to analyze strategic threats, which is a key feature of the Kosovo crisis.

⁶ First asylum places a moral, and to some extent a legal, obligation on countries not to turn away a refugee if one appears first on their territory. Otherwise, countries could refuse entry or pass the refugee on to another country; the refugee could be handed from one country to another indefinitely, with no one accepting responsibility.

$$y_{12} > y_{11} \text{ and } y_{22} > y_{21}. \quad (3)$$

NATO also prefers that Macedonia permit asylum rather than withhold asylum, so it follows that

$$y_{11} > y_{21} \text{ and } y_{12} > y_{22}. \quad (4)$$

[Insert Figure 1 here]

As in Brams (1994), the payoffs are treated as ordinal rather than cardinal. Let 4 denote the best outcome and 1 denote the worst outcome. A player's priorities can be inferred from its payoffs. The payoff 4 identifies the outcome that achieves both of a player's priorities and the payoff 1 reveals the outcome that achieves neither of its priorities. The outcome that achieves a player's first priority but not its second has a payoff of 3 and the outcome that achieves the player's second priority but not its first has a payoff of 2.

Conditions (1) and (2) together imply that $x_{12} < x_{11} < x_{21}$ and $x_{12} < x_{22} < x_{21}$, which are consistent with only two rank orderings of outcomes for Macedonia:

$$x_{21} = 4, x_{11} = 3, x_{22} = 2, x_{12} = 1 \quad (5)$$

$$x_{21} = 4, x_{22} = 3, x_{11} = 2, x_{12} = 1. \quad (6)$$

Notice that rank ordering (5) implies that Macedonia's first priority is gaining asylum assistance from NATO, while rank ordering (6) implies that Macedonia's first priority is withholding asylum.

Conditions (3) and (4) together imply that $y_{21} < y_{11} < y_{12}$ and $y_{21} < y_{22} < y_{12}$, which are consistent with only two rank orderings of outcomes for NATO:

$$y_{12} = 4, y_{22} = 3, y_{11} = 2, y_{21} = 1 \quad (7)$$

$$y_{12} = 4, y_{11} = 3, y_{22} = 2, y_{21} = 1. \quad (8)$$

Notice that rank ordering (7) implies that NATO's first priority is limiting its obligation to financial assistance, while rank ordering (8) implies that NATO's first priority is convincing Macedonia to permit asylum for the refugees.

The possible configurations of payoffs — given the player's priorities — are shown in Figure 2. Configuration 1 (game 32 in TOM — the famous prisoners' dilemma) combines rank orderings (5) and (8). That is, the first priority for Macedonia is to secure asylum assistance from NATO, while the first priority for NATO is inducing Macedonia to grant asylum to the refugees. Note that the second priority for each player (withholding asylum for Macedonia and avoiding asylum assistance for NATO) is in conflict with the other player's first priority in this case.

[Insert Figure 2 here]

We obtain configuration 2 (game 11 in TOM — a total conflict game) in Figure 2 by switching the rank ordering of first and second priorities for *either* player relative to game 32. For example, combining rank orderings (5) and (7) yields configuration 2. Symmetry suggests — and the reader can easily verify — that combining rank orderings (6) and (8) yields an equivalent game.⁷ In either case, the first priorities of the players are in total conflict.

We obtain configuration 3 (game 9 in TOM) in Figure 2 by switching the rank ordering of first and second priorities — relative to game 32 — for *both* players. Configuration 3 combines rank orderings (6) and (7), so that Macedonia's first priority is withholding asylum and NATO's first priority is limiting its obligation to financial assistance. Unlike game 11, the first priorities of the two players are not in conflict in game 9.

Before asking which configuration in Figure 2 best reflects the strategic game on the Macedonian border, we investigate the necessary conditions for a credible threat. TOM provides these conditions for 2x2 ordinal games (Brams and Hessel 1984; Brams 1994).⁸ As we will demonstrate in the next section, two of the three games shown in Figure 1 yield no credible threats, which leaves only one possible configuration of payoffs for the strategic game.

4. Theoretical Analysis

Threat power analysis in TOM assumes a context of repeated interaction — not necessarily of the same game — in which a reputation is useful, so that implementation of a costly threat can be rational. Given Macedonia's interest in gaining membership in NATO and of the latter's ongoing interest in the Balkans, repeated interaction is a

⁷ Two games are equivalent if one game can be transformed into another by switching the row player's strategies, the column player's strategies, the players themselves, or any combination of these (Brams 1994, 215).

⁸ Gilboa (1995), Stone (2001), and Brams (2001) offer contrasting perspectives on TOM as a framework for understanding strategic behavior. Stone criticizes the idea of moving power, using TOM for inherently simultaneous games (e.g., chicken), and the lack of axiomatic foundations for threat (and other forms of) power in TOM. Moving power does not arise in this paper, since the games are non-cyclic. Moreover, both players have dominant strategies, so the dominant-strategy equilibria are the same whether play is simultaneous or sequential.

reasonable assumption for both players.⁹ The theoretical analysis is presented in terms of the generic game in Figure 1, where some payoffs are left unspecified, so that the analysis applies to all payoff configurations in Figure 2. For convenience, we identify the equilibrium strategy sets by the outcomes at their intersection. This convention introduces no ambiguity, since only pure-strategy equilibria are identified in ordinal games.

Following Brams (1994, 143-8), suppose Macedonia seeks to implement its desired outcome in Figure 1, denoted by the payoffs (x_{ij}, y_{ij}) , but knows that NATO desires a different outcome. Macedonia could try to maneuver the game to a desired outcome by devising a threat such that the game ends at a mutually disadvantageous state (x_{mn}, y_{mn}) that is a Nash equilibrium if NATO rejects (x_{ij}, y_{ij}) . Following Brams (1994), a threat is called “real” if and only if $y_{mn} < y_{ij}$. A threat is called “rational” if and only if it is costly for Macedonia, $x_{mn} < x_{ij}$ (otherwise, Macedonia would seek to realize the outcome associated with the payoff x_{mn} and not merely use it as a threat). Therefore,

$$x_{mn} < x_{ij} \quad \text{and} \quad y_{mn} < y_{ij} \quad (9)$$

are necessary (but not sufficient) conditions for a credible threat. Let the state associated with (x_{ij}, y_{ij}) be Macedonia’s “threat state” and the associated strategy be its “threat strategy.” Let the state associated with (x_{mn}, y_{mn}) be Macedonia’s “breakdown state” and the associated strategy be its “breakdown strategy.”¹⁰ An effective breakdown state must be a Nash equilibrium (otherwise, the threat could be eluded by a unilateral move). When the conditions in (9) are satisfied, the breakdown state will be worse for both players than the threat state.

In a case where $m = i$, Macedonia’s threat and breakdown strategies will be the same. Brams (1994) refers to this case as a “compellent threat,” using a term from Schelling (1966). Given the conditions in (9), $x_{ij} = 4$ is sufficient for Macedonia to have a compellent threat.¹¹ In the case where $m \neq i$, Macedonia’s threat and breakdown strategies will differ, so it must switch strategies to implement its threat. Brams (1994) refers to this case as a “deterrent threat,” another term coined by Schelling (1966). For a deterrent threat, Brams (1994, 146) has demonstrated that y_{ij} and y_{mn} must take on the values

$$y_{ij} = 3 \quad \text{and} \quad y_{mn} = 2. \quad (10)$$

NATO could also have a compellent or deterrent threat and the analysis can easily be adapted to those cases.

Having identified the conditions for a credible threat, are any of the configurations of payoffs in Figure 2 compatible with the strategic threats that were issued when the Kosovo refugees were trapped on the Macedonian border? No outcome in game 11 is worse for both players than any other outcome. Thus, it is impossible to satisfy condition (9), which is necessary for a credible threat. With no possibility for strategic threats, game 11 would settle at the dominant-strategy equilibrium (WF), which would leave the refugees without a place of asylum.¹² In Figure 2, Game 9, there is one outcome (PA) that is worse for both players than another outcome (WF). However, PA is not a Nash equilibrium, because each player can achieve a higher payoff by making a unilateral move (Macedonia to WA and NATO to PF). Regardless of which player moves, the game gravitates to the dominant-strategy equilibrium (WF) and there are no credible threats that can induce a different outcome.¹³ Given that games 11 and 9 fail to satisfy the necessary conditions for strategic threats, we are left with game 32.

In game 32, Macedonia most prefers the outcome WA, but it cannot implement this outcome by using a strategic threat, since $y_{ij} = y_{21} = 1$ violates condition (9), which is necessary for the threat to be real. Yet Macedonia could implement its next-best outcome (PA) by applying a deterrent threat. That is, Macedonia could permit asylum if NATO provides asylum assistance, but withhold asylum if NATO offers only financial assistance. In this case PA is the threat state and WF is the breakdown state for Macedonia.

Note that Macedonia’s threat is a deterrent one because its threat and breakdown strategies differ. The threat is also real, because NATO receives a lower payoff in WF than in PA. If NATO countries take Macedonia’s deterrent threat seriously (i.e., believe the threat would actually be carried out if necessary), PA would be a stable

⁹ Repeated play in TOM is different from the usual meaning in the game theory literature, because Brams (1994) does not impose cardinal utilities, use discounting, or assume that a stage game is played, *de novo*, again and again.

¹⁰ In other approaches to bargaining, the threat state would be called the bargaining solution and the breakdown state would be called the threat (or status-quo) point (Mas-Collel, Whinston, and Green 1995, 839).

¹¹ Brams (1994, 145) claims that the conditions in (1) and $x_{ij} \geq 3$ are sufficient for a credible threat. However, in private correspondence, he has confirmed that this claim is incorrect and noted that game 36 in TOM provides a counter-example.

¹² As a dominant-strategy equilibrium, WF is also the unique Nash equilibrium of the game. Furthermore, WF is the unique nonmyopic equilibrium for game 11 in the standard (strictly alternating moves) version of TOM (Brams 1994, 217).

¹³ As in game 11 above, WF is both the unique Nash equilibrium of game 9 and the unique nonmyopic equilibrium under the standard rules of play in TOM (Brams 1994, 217).

outcome. As a recently created state, Macedonia had little history in which to establish an international reputation, so it might need to demonstrate the credibility of its threat to NATO.

By the symmetry of payoffs in game 32, NATO has a comparable threat. Like Macedonia, NATO cannot implement its most preferred outcome (PF), but it can attain PA instead of settling for WF. Its strategic threat is to offer purely financial assistance if Macedonia withholds asylum. NATO's threat is also a deterrent one, as its threat and breakdown strategies differ. The threat is real, because Macedonia receives a lower payoff in WF than in PA. Thus, in repeated play the interests of each player could sustain an agreement to cooperate.¹⁴ Before we begin the interpretation of the crisis, it should be noted that, unlike Macedonia, NATO began the refugee crisis with a well-established reputation and Operation Determined Falcon was specifically undertaken to reinforce NATO's reputation.¹⁵

5. Interpretation of the Crisis

In 1998, fighting between the Serbian government and Albanian separatists in the Serbian province of Kosovo generated the first wave of Kosovo refugees, estimated at 300,000 of the approximately 1.8 million ethnic Albanian Kosovars (Daalder and O'Hanlon 2000). The conflict in Kosovo worsened Macedonia's already delicate position.

A multicultural nation with a large Albanian minority,¹⁶ Macedonia had only recently declared its independence from Yugoslavia. Its feeble economy depended heavily on the UN Preventive Deployment force in Macedonia (UNPREDEP) (Sokalski 1998). In Kosovo and Albania irredentists sought a Greater Albania, while to the south, Greece objected to Macedonia's name. Earlier in the crisis, Macedonia could have sided with Russia, which opposed NATO's response to the Serbs, thereby avoiding associated responsibilities. Having opted to support NATO, Macedonia nevertheless challenged NATO three times by closing its borders temporarily to the refugees. We seek to interpret the border closings in the discussion that follows.

Even as the crisis grew, NATO planners believed the flow of refugees would be manageable. Early estimates of the possible exodus ran at about 350,000, similar to the initial wave in 1998 (Daalder and O'Hanlon, 2000: 302, fn. 25). European countries were already accepting some Albanian refugees, with the largest number admitted to Germany (Minnear 2000). Before the bombing campaign by NATO there were more Kosovo refugees in Western Europe and beyond than in the neighboring countries (UNHCR 2000, 234). Throughout this phase of the crisis, Macedonia permitted asylum and its refugee population slowly swelled from about 6,000 to about 16,000 by December 1998, with another 260,000 displaced persons within Kosovo (Van Selm 2000). Macedonia agreed on March 2, 1999 to extend "humanitarian assisted status" to refugees who could find host families in the country, making them eligible for assistance from the Macedonian Red Cross.¹⁷

When the bombing campaign began in Kosovo in late March of 1999, the situation at the Macedonian border changed rapidly. According to Surkhe, et al. (2000, 36), Macedonian border guards began using meticulous documentation checks to slow the entry of the refugees, effectively halting tens of thousands of people at the border. NATO hurried to provide a refugee camp outside Macedonia's border (Surkhe, et al. 2000, 6), and several thousand refugees were also hastily relocated to other countries (Surkhe, et al. 2000: 36). It is clear from these events that game 32 moved to the breakdown state in late March.¹⁸

Yet, as the theoretical analysis predicts, the move to the breakdown state was only temporary. Over the weekend of April 2-4, Macedonia agreed to take more refugees in exchange for additional NATO-built camps, the

¹⁴ Computer simulations by Axelrod (1984, 1997) have generated a large literature on the prospects for cooperation in the prisoners' dilemma game under repeated play. For critical reviews of this literature, see Binmore (1998) and Hoffman (2000).

¹⁵ The folk theorem for repeated games (Kreps 1990, 505-515) ensures that cooperation can be sustained in the prisoners' dilemma, provided the future looms sufficiently large in the decisions of the players. The future can be represented by a probability of the game continuing for another round or discount rates for the players. To derive sufficient conditions for cooperation (in terms of the probability of continuing or the discount rates), it is necessary to assign cardinal rather than ordinal payoffs and it would typically be assumed that the players maximize expected utilities. For an approach to this problem, see Kreps (1990).

¹⁶ In 1994, the Albanian population in Macedonia was officially 21.7% of the overall population of 2.2 million. An Information Ministry official said it might be higher, perhaps 25% (Kamm, 1994). The population is mostly Slav.

¹⁷ This status was extended several times, with the last period expiring on March 28, 2000 (Country Report: Macedonia 2000).

¹⁸ The U.S. Committee for Refugees (USCR 2000, 255) claims that Macedonia closed its border on March 23, but reopened it the following day.

evacuation of many refugees to other countries, and promises of economic assistance. The World Bank took the initiative on April 3rd to gather donors and arrange emergency credit (Surkhe, et al. 2000). The essential elements of the agreement were worked out between NATO and Macedonia, with the UNHCR having no major role in the negotiations. Morris (1999, 19) confirms the conditional nature of asylum, “NATO’s readiness to build camps and the start of the humanitarian evacuation program was the ‘package’ Macedonia required to allow asylum.”

Notice that the breakdown state for game 32 (WF) in Figure 2 is identical to the dominant-strategy equilibria (WF) in games 9 and 11 in Figure 2. On April 1, 1999, it would have been difficult, if not impossible, to determine which game in Figure 2 best fit the crisis on the Macedonian border. In their interpretation of the events of March 30 – April 1, Surkhe, et. al. (2000) suggest that Macedonia “panicked” when far more refugees arrived at its border than had been anticipated. This interpretation fits game 9 (the total conflict game), where Macedonia perceives that its interests are in total conflict with those of NATO and, therefore, sees no possibility for cooperation. However, this interpretation becomes difficult to sustain after April 2, as cooperation emerges.

In May, an estimated 210,000 of the over 800,000 Kosovar refugees had sought asylum in Macedonia (BBC 1999).¹⁹ While NATO airlifted between 1000 and 2000 refugees daily to other countries, the number of arrivals still exceeded 10,000 per day. On May 5, Macedonia closed its borders a second time (BBC 1999). Amnesty International accused Macedonia of playing politics with the refugees, alleging that it was “using border closings to prompt quicker action in evacuating refugees” (Amnesty International 1999, 2). This interpretation fits game 32. USCR (2000, 256) reports that nearly 92,000 refugees had been transferred to 29 host countries by the end of June. Moreover, the World Bank approved another \$50 million in Emergency Recovery Credit on May 13, enabling Macedonia to address several problems, including shortfalls in export revenues, rising balance of payment pressures, and exceptional demands on public expenditures” (Surkhe, et al. 2000, 134).

Macedonia’s actions on May 5 can be interpreted as a second implementation of its deterrent threat. As waves of refugees continued to arrive, and Macedonia needed assurance that NATO would share the asylum burden. The greatest leverage for eliciting assistance would be *before* refugees entered the country. Control of borders is an internationally recognized prerogative of all states; expelling refugees after granting asylum is far more difficult. Macedonia’s willingness to negotiate supports this interpretation, as does its cooperation when assistance was forthcoming.²⁰

The fighting in Kosovo ended on June 9, at which point various governments, especially from the European Union, concluded a Stability Pact for the region to promote recovery (Proksch 2000). NATO quickly began to return displaced Kosovars to their homes, but encountered difficulties. The Serbs had destroyed great quantities of essential public ownership records, rendering resettlement efforts aiming for a *status quo ante* difficult, if not impossible. To further complicate matters, some ethnic Albanians sought to revenge themselves on ethnic Serbs after the conflict (Daalder and O’Hanlon 2000).

Despite delays, the number of refugees in Macedonia fell to about 17,000 (10,000 Albanians) by the end of 1999 (Country Report: Macedonia 2000), though the Macedonian government still feared that some refugees might not leave, or that they might engage in violence. By agreement, NATO forces were reduced from about 30,000 to 7,000 by year’s end. However, disputes over the calculation of NATO’s use of electricity and water while in the country delayed payment. In September, Foreign Minister Aleksandr Dimitrov appealed to the international community to live up to its promises by assisting Macedonia in addressing the economic problems associated with its cooperation in the Kosovo crisis (FBIS 1999). The lack of progress on these matters suggests that, with the refugee numbers dwindling and few new asylum seekers coming, Macedonia had less leverage than before.

Several years later, sporadic violence continues between the Macedonian military and ethnic Albanians along the Kosovo border. Recent elections have raised hopes that some of the tensions extant in the country will be resolved. NATO and other international organizations have provided some additional assistance — financially and militarily — though neither NATO nor the EU are currently considering Macedonia for membership.

6. Conclusion

As Serb forces drove ethnic Albanians from their homes in Kosovo in 1999, NATO feared another humanitarian disaster in the Balkans. It responded with intensive bombing of Serb forces, called “Operation Allied Force.” While meant to protect the ethnic Albanians, NATO bombing (and Serbian reaction to it) triggered refugee flights, mainly to Albania and Macedonia. Macedonia was willing to assist NATO efforts initially (when the refugee burden was modest and shared with NATO), but changed its position when trainloads of refugees began arriving at

¹⁹ Another source puts the figure of people seeking refuge in Macedonia at 360,000 (Country Report 2000).

²⁰ The humanitarian evacuation program is what distinguishes the responses of NATO to the refugee situations in Macedonia and Albania. This is discussed in greater detail in Williams and Zeager (2004).

its borders. We seek to understand the strategic behavior of Macedonia in this crisis by applying the threat power version of the theory of moves (TOM) by Brams (1994). The deterrent threats in TOM help us explain how a fragile nation exercised leverage over a far more powerful coalition. The analysis shows the importance of distinguishing between asylum countries behaving uncooperatively from those using a strategic threat to (ultimately) achieve a cooperative outcome.

Macedonia is not the only example of a seemingly weaker country implementing a successful deterrent threat to influence the outcome of a refugee crisis. Thailand and Malaysia temporarily closed their borders to new asylum seekers to convince the United States and other Western nations to provide more resettlement assistance to the boat people arriving in their countries following the Vietnam War. As Zeager (2002) has shown, the Indochinese crisis had the same payoff structure – a prisoners’ dilemma – as the Macedonian crisis and the dynamics of strategic interaction were similar. When refugee numbers became overwhelming, Thailand and Malaysia closed their borders but continued to negotiate for more resettlement assistance. As with Macedonia, the border closings led to an outcry from the international community, but also elicited generous resettlement offers. Finally, problems with “defection” from the cooperative solution, especially by the Western nations, were solved by revisiting the breakdown state (i.e., repeated border closings).

The Cuban *balsero* (rafter) crisis of 1994 also had a prisoners’ dilemma payoff structure (Zeager 2004). Cuba and the United States each employed threats (Cuba removing all barriers to emigration and the United States intercepting *balseros* and holding them at Guantanamo Bay) to deter the other from defecting from the cooperative solution. Once the credibility of the threats was established, the two nations – which had been so hostile that they cut off all formal relations for over two decades – quickly achieved cooperation, with Cuba patrolling its borders and the United States admitting 20,000 Cubans per year. The agreement has remained in effect since then, with minor modifications.

We should also point out that, while prisoners’ dilemma games arise repeatedly in refugee crises, not all cases take this form. Preliminary research we have conducted on refugee negotiation games between NATO and Albania in 1999, Cuba and the United States in 1965 and 1980, and Pakistan and the United States in the Afghan refugee crisis during the 1990s suggest that these situations do not include the prisoners’ dilemma (game 32). Unlike the prisoners’ dilemma, these games predict two equilibrium outcomes, with the actual outcome depending on which player has threat power. These games are more difficult to analyze: some were resolved without incident (Albania), some were resolved with some difficulty and undermined receptivity toward future refugee flows (Cuban refugees to the United States), and some remained unresolved for longer periods (Afghan refugees in Pakistan). More research will be needed to better understand these cases.

Strategic analysis of the interactions among players in refugee crises provides a significant addition to the existing literature. Refugee studies typically focus on categories defined by types of crises or differences in levels of aid or asylum provision. Observers of refugee crises often characterize disagreements among potential asylum and donor countries as policy failures by one side or another. TOM offers a new perspective by treating the participants as players in a strategic game, organizing the cases by their payoff structures, and comparing the dynamics of the strategic interaction arising from each payoff structure. As we extend the analysis to additional refugee crises, it should be possible to explain more of the variation in behavior within and across categories used in the existing literature.

Bibliography

Amnesty International. (1999). Playing Politics with Refugees in Macedonia. Retrieved January 15, 2003 from the World Wide Web: <http://www.amnesty.org/ai.nsf/print/EUR700711999?OpenDocument>

Axelrod, Robert. (1997). The Complexity of Cooperation: Agent-Based Models of Competition and Collaboration. Princeton: Princeton University Press.

Axelrod, Robert. (1984). The Evolution of Cooperation. Basic Books.

Binmore, Ken. (1998). Review of The Complexity of Cooperation (by Robert Axelrod), Journal of Artificial Societies and Social Simulation. 1:1 from the World Wide Web: <http://jasss.soc.surrey.ac.uk/1/1/review1.html>

Brams, Steven J. (1994). Theory of Moves. Cambridge: Cambridge University Press.

Brams, Steven. (2001). "Response to Randall Stone: Heresy or Scientific Progress?" Journal of Conflict Resolution, 45:245-254.

Brams, Steven J. and M.P. Hessel. (1984). "Threat Power in Sequential Games." International Studies Quarterly. 28:23-44.

Brams, Steven J. and Jeffrey M. Togman. (1998). "Cooperation through Threats: The Northern Ireland Case." PS: Political Science and Politics. 31:32-39.

British Broadcasting Company. (1999, May 6). Macedonia "Using Refugees as Lever". Retrieved September 17, 2002 from the World Wide Web: <http://news.bbc.co.uk/1/hi/world/europe/336774.stm>

"Country Report: Macedonia." (2000). Worldwide Refugee Information. United States Committee for Refugees. Retrieved September 13, 2002 from the World Wide Web: <http://www.refugees.org/world/countryrpt/europe/2000/macedonia.htm>

Daadler, Ivo and O'Hanlon, Michael. (2000). Winning Ugly. Washington D.C.: Brookings Institution.

del Mundo, Fernando and Ray Wilkerson. (1999). "Kosovo's Race Against Winter (Time)," Refugees. 3:4-17.

Foreign Broadcast Information Service. (1999). "The Internal Conflicts Could Be Crucial for Macedonia." Skopje Utrinski Vesnik (in Macedonian), 17-18 July 1999. Foreign Broadcast Information Service translated text. FBIS Publications (CDROM) Washington: U.S. Central Intelligence Agency, (July-September 1999), Disc no. 3.

Gilboa, Itzhak. (1995.) "Reviews and comments [Review of Theory of Moves]" Games and Economic Behavior 10:368-372.

Hamburger, Henry. (1979). Games as Models of Social Phenomena. San Francisco: W.H. Freeman and Company.

Hoffman, Robert. (2000). "Twenty Years on: The Evolution of Cooperation Revisited," Journal of Artificial Societies and Social Simulation. 3(3) from the World Wide Web: <http://www.soc.surrey.ac.uk/JASSS/3/2/forum/1.html>

Kamm, Henry. (1994). "Macedonia Sees Its Albanians as Its 'Biggest Problem'." The New York Times. May 5, 1994 A15.

Kreps, David M. (1990). Microeconomic Theory. Princeton: Princeton University Press.

Mas-Collel, Andreu, Michael Whinston, and Jerry Green. (1995) Microeconomic Theory. New York: Oxford University Press.

Minnear, Larry. (2000, January). "NATO and NGOs During the Kosovo Crisis." NGO Policy Dialogue VI. Humanitarianism and War Project. Retrieved September 13, 2002 from the World Wide Web: <http://hwproject.tufts.edu/new/pdf/Report06.pdf>

Morris, Nicholas. (1999). "Origins of a Crisis," Refugees 3:18-19.

Proksch, Sven-Oliver. 2000. Negotiating European Foreign Policy: The EU and the Stability Pact for South Eastern Europe. WWS Case Study 3/01. Princeton, NJ: Woodrow Wilson School of Public and International Affairs.

Schelling, Thomas. (1966). The Strategy of Conflict. Oxford: Oxford University Press.

Stone, Randall W. (2001). "The Use and Abuse of Game Theory in International Relations: The Theory of Moves" Journal of Conflict Resolution, Vol. 45 Issue 2 (April), p216-230.

Surkhe, Astri, Michael Barutciski, Peta Sandison, and Rick Garlock. (2000, February). The Kosovo refugee Crisis: An Independent Evaluation of UNHCR's Emergency Preparedness and Response. Commissioner for Refugees Evaluation and Policy Analysis Unit. United Nations High Commissioner for Refugees. Retrieved September 17, 2002 from the World Wide Web: http://www.unhcr.ch/cgi-bin/texis/vtx/home/+dwwBme2UcZ_wwwwwwwwwwwwFqo20I0E2glFqoGn5nwGqrAFqo20I0E2glcFqaBrnaAd5dVdaGnh1tnnaqGo5oawDmaoDmnpnDmnDBanVwc1wBodDaDzmxwwwwww/opendoc.pdf

UNCHR. (2000). The State of the World's Refugees: Fifty Years of Humanitarian Action. Oxford: Oxford University Press.

USCR. (2000). World Refugee Survey, 2000. Washington, D.C.: U.S. Committee for Refugees.

Williams, John H.P. and Zeager, Lester A. (2004). "Macedonian Border Closings in the Kosovo Refugee Crisis: A Game-Theoretic Perspective," Conflict Management and Peace Science, forthcoming.

Zeager, Lester A. (2004). "Strategic Interaction in the 1994 Cuban Balsero Crisis," unpublished manuscript.

Zeager, Lester A. (2002). "The Role of Strategic Threats in Refugee Resettlement: The Indochinese Crisis of 1978-79," Rationality and Society 14:159-191.

Zeager, Lester A. (1998). "Negotiations for Refugee Repatriation or Local Settlement: A Game-Theoretic Analysis," International Studies Quarterly. 42:367-384.

Zeager, Lester A. and Johnathan Bascom. (1996). "Strategic Behavior in Refugee Repatriation: The Game-Theoretic Analysis," Journal of Conflict Resolution 40:460-485.

Figure 1
Generic Game for the Kosovo Refugee Crisis
On the Macedonian Border

		NATO	
		Asylum Assistance (A)	Financial Assistance Only* (F)
Macedonia	Permit Asylum (P)	PA (x_{11}, y_{11})	PF ($x_{12} = 1, y_{12} = 4$)
	Withhold Asylum* (W)	WA ($x_{21} = 4, y_{21} = 1$)	WF (x_{22}, y_{22})

$(x, y) =$ (payoff to Macedonia, payoff to NATO)

* Dominant strategy (with dominant strategy equilibrium outcome in boldface)

Figure 2
Possible Payoff Configurations for Macedonia and NATO
in the Kosovo Refugee Crisis

Configuration 1: Game #32 in TOM (Prisoners' Dilemma)

		NATO	
		A	F*
Macedonia	P	(3,3)	(1,4)
	W*	(4,1)	(2,2)

Configuration 2: Game #11 in TOM (Total Conflict of Interests)

		NATO	
		A	F*
Macedonia	P	(3,2)	(1,4)
	W*	(4,1)	(2,3)

Configuration 3: Game #9 in TOM

		NATO	
		A	F*
Macedonia	P	(2,2)	(1,4)
	W*	(4,1)	(3,3)

Notation:

*Dominant strategy

P: permit asylum; W: withhold asylum; A: asylum assistance; F: financial assistance only

(x,y) = (payoff to Macedonia, payoff to NATO)

4 = best; 3 = next best; 2 = next worst; 1 = worst

TOM: Theory of moves (Brams 1994)