

This article was downloaded by:[University of Georgia]
On: 13 March 2008
Access Details: [subscription number 768501129]
Publisher: Routledge
Informa Ltd Registered in England and Wales Registered Number: 1072954
Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Conflict Management and Peace Science

Publication details, including instructions for authors and subscription information:
<http://www.informaworld.com/smpp/title-content=t713669203>

At What Price Victory? The Effects of Uncertainty on Military Intervention Duration and Outcome

Patricia L. Sullivan^a

^a Department of International Affairs, School of Public and International Affairs, The University of Georgia, Athens, Georgia, USA

Online Publication Date: 01 March 2008

To cite this Article: Sullivan, Patricia L. (2008) 'At What Price Victory? The Effects of Uncertainty on Military Intervention Duration and Outcome', *Conflict Management and Peace Science*, 25:1, 49 - 66

To link to this article: DOI: 10.1080/07388940701860383

URL: <http://dx.doi.org/10.1080/07388940701860383>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article maybe used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

At What Price Victory? The Effects of Uncertainty on Military Intervention Duration and Outcome

PATRICIA L. SULLIVAN

Department of International Affairs
School of Public and International Affairs
The University of Georgia
Athens, Georgia, USA

I extend the implications of a rationalist model of war initiation to explore the effects of uncertainty about the cost of prosecuting a war to victory on the duration and outcome of military operations. When the attributes of a potential armed conflict create uncertainty about the human and material costs of attaining a state's war aims, states are at risk of selecting themselves into long, costly, and ultimately unsuccessful military engagements. The more the actual costs of fighting exceed a state's prewar expectations, the greater the likelihood that it will eventually be pushed beyond its cost-tolerance threshold and forced to unilaterally withdraw from the conflict before it attains its war aims. At the same time, states must fight longer before they arrive at accurate estimates of what it will cost to attain their objectives when the attributes of a conflict contribute to high levels of uncertainty.

Keywords war aims, asymmetric conflict, cost tolerance, uncertainty, war termination

Introduction

War-fighting is a high-stakes enterprise for national leaders. At times, states that use military force abroad are able to achieve their objectives at a human and material cost they consider acceptable. Frequently, however, they fail to obtain their war aims and they bear higher than expected social, economic, and political costs in the war effort. Much of the recent literature on war initiation in political science has centered on what have become known as “rationalist” explanations for war. According to one rationalist explanation for war, incomplete information about an adversary's military capabilities and resolve makes it difficult for leaders to arrive at accurate predictions about the likely cost and outcome of military operations. In this atmosphere of uncertainty, decision makers lead countries into ill-fated wars because they underestimate the cost and/or overestimate the likelihood of victory. As scholar Geoffrey Blainey (1973) famously states, “war is a failure of measurement.”

I extend the implications of a rationalist model of war initiation (Fearon, 1995; Powell, 2004), to explore the effect of uncertainty about the cost of prosecuting a war to victory on the duration and outcome of military interventions. Rationalist theories of war initiation often assume that states are uncertain about the *probability* of victory in a prospective war or, more specifically, the balance of military capabilities between them and their adversaries. But my focus here is on the accuracy of leaders' prewar expectations about the *cost* of attaining their objectives through the use of military force against decisively weaker opponents. In the model I present, states select themselves into armed conflicts only when their prewar

estimates of the cost of attaining their political objectives through the use of force fall below the threshold of their tolerance for costs. The more the actual costs of fighting exceed a state's prewar expectations, the greater the risk that it will be pushed beyond its cost-tolerance threshold and forced to unilaterally withdraw its forces before it attains its war aims.

Under what conditions are a state's leaders most likely to underestimate the human and material costs of achieving their war aims? The answer is critical to our understanding of both war initiation and war termination, but extant scholarship in international relations provides neither the theory nor the data to answer it. Existing theories recognize that misperception and miscalculation are common causes of war. But these theories are incomplete if they cannot predict *when* state leaders are most likely to underestimate the cost of prosecuting a war to victory.

When the attributes of a potential armed conflict create uncertainty about the human and material costs of attaining the state's war aims, states are at risk for selecting themselves into military engagements that are longer and more costly than anticipated. I argue that when materially strong states use military force against weak state and nonstate targets, the nature of the strong state's primary political objective determines whether relative military capabilities (*destructive capacity*) or relative resolve (*cost tolerance*) has a greater impact on the cost of victory. Because leaders are more likely to have accurate estimates of relative destructive capacity than of relative cost tolerance, we can expect estimates of the cost of victory to become less accurate as relative resolve becomes a more influential factor. I employ a typology of political objectives that places the political objectives states pursue through the use of military force on a continuum based on the degree of *target compliance* required to attain the objective. As states become more dependent on target compliance to achieve their war aims, the target's cost tolerance becomes a greater determinant of the cost of victory and uncertainty increases.

Although I cannot measure uncertainty directly, I expect wars to be longer, and war initiators to be less likely to prevail, when prewar uncertainty is greatest (Slantchev, 2004). The results of a quantitative analysis in which I use a multinomial logit model to predict the duration and outcome of 122 military operations since World War II provide evidence that strong states are more likely to select themselves into long wars they cannot sustain to victory when they pursue political objectives that are dependent on target compliance.

Expectations and War Outcomes

Johnson (2004) argues that there is a human tendency to overconfidence that is likely to be a particularly common trait among political leaders and an especially acute problem in crisis decision making. According to Johnson (2004), a "fog of hope and wishful thinking" is often present at the initiation of violent conflicts. The idea is not new. Blainey (1973) asserts that war is "the outcome of a diplomatic crisis that cannot be solved because both sides have conflicting estimates of their bargaining power" (114). Because war results from a disagreement about relative military capabilities, he argues that hierarchical systems, in which differences in power are clear, are the least war-prone. Similarly, Jervis (1988) claims that "Excessive military optimism is frequently associated with the outbreak of war" (p. 676), and Van Evera (1999) implicates "false optimism about relative power" as the proximate cause of most wars (p. 16).

In his influential article on rationalist explanations for war, Fearon (1995) demonstrates that, because war is costly and risky, there should always be a range of bargains that both states would prefer to war. However, because leaders do not have complete information about their opponents' power and resolve, and have difficulty communicating this information

because they have incentives to misrepresent their own capabilities and willingness to fight, both states could *believe* that they would obtain a better outcome by going to war than by accepting any negotiated settlement their opponent is willing to offer. The key is that, because one or both sides lack complete information, fully rational leaders could come to different conclusions about the probable outcome of a war between them.

Filson and Werner (2002), Slantchev (2003), Powell (2004), and Wagner (2000) expand on Fearon's model, relaxing the assumption that both sides must believe they will win a *military* victory in order for war to be rational. Even a state that has no expectation that it could prevail in a military contest with a stronger adversary could benefit from fighting if it could raise that adversary's estimate of the weak state's power. By convincing its opponent that it is stronger than the opponent originally thought, the weak state could then settle on terms that would be better than any available prewar bargain. According to Slantchev (2003), the "Principle of Convergence states that once expectations [about what each side is prepared to concede] converge sufficiently, war loses its informational content, and hostilities can terminate with a negotiated settlement" (p. 621).

All of the authors recognize that states can be uncertain about more than just the distribution of military capabilities between them, but none of them attempt to theorize about the major source of uncertainty in many wars, uncertainty about the adversary's *tolerance for costs*. In essence, many models assume that states could avoid war by negotiating a prewar bargain based on the distribution of power between them, if only states could come to a consensus about the nature of that distribution. Unfortunately, predicting war outcomes is much more complicated than arriving at an accurate measure of relative military capabilities. In fact, the relative balance of military capabilities is not likely to be the primary source of prewar uncertainty and even complete information about the distribution of war-fighting capacity is unlikely to translate directly into accurate predictions about the cost and outcome of many wars.

To predict war outcomes from data on relative capabilities we must make the implicit assumption that both sides commit either the full force of their capabilities or at least equal proportions of their capabilities to the fight. But many wars are characterized by an imbalance in the interests the belligerents have at stake and, consequently, the resources they are willing to commit to the fight. At the same time, wars frequently end before either side's war-fighting capacity is exhausted because one or more of the belligerents becomes convinced that the cost of attaining its objectives will exceed the price it is willing to pay in blood and treasure. Consequently, even if a leader has a good sense of the balance of military capabilities between her state and the adversary's, there may be a great deal of uncertainty about what proportion of those capabilities her state's military would confront on the battlefield or what it would take to exceed her adversary's cost-tolerance threshold. As a result, dispassionate, fully rational individuals with complete information about the war-fighting capacity of two states could easily disagree about the likely outcome of a war between them.

A General Theory of War Termination

Actors can achieve their objectives in war in one of three ways. An actor can:

1. Render her opponent physically incapable of maintaining organized resistance or continuing to pursue his own war aims;
2. Convince her opponent that she will eventually render him incapable of maintaining organized resistance or continuing to pursue his own war aims, or;
3. Convince her opponent that the costs of prosecuting the war to victory will be greater than the price he is willing to pay to attain his war aims.

Because there are multiple paths to strategic victory in war, military operations often serve several purposes at once. Actors use their military capacity to physically destroy their opponent's capacity to maintain organized resistance, to change their opponent's beliefs about the eventual outcome of a war fought to the finish, and to change their adversary's beliefs about the cost of continuing to fight.

Each belligerent in an armed conflict possesses some quantity of the two primary determinants of war outcomes: *destructive capacity* and *tolerance for the costs of war*. An actor's destructive capacity is the physical effect it can produce given the material resources and war-fighting capabilities of its armed forces. Factors like training, technology, leadership, military hardware, doctrine, tactics, and operational capabilities all interact to determine the destructive capacity of an actor's military forces (Biddle, 2004; Millett et al., 1988; Reiter & Stam, 2002; Stam, 1996). Relative destructive capacity directly affects the probability that one side will eventually render the other physically incapable of continuing to fight. But relative destructive capacity can also affect war outcomes by partially determining the level of costs an actor can impose and his own vulnerability to his adversary's attempts to impose costs (Stam, 1996).

Cost tolerance is the extent to which an actor is *willing* (or politically able) to absorb the human and material costs imposed by an adversary and to bear the human, material, and opportunity costs of using force against that adversary to achieve its objectives (see Rosen, 1972, for a similar definition). In theory, cost tolerance varies along a continuum from unwillingness to absorb any human or material costs in pursuit of an objective to the acceptance of any and all costs that must be borne in order to prevail. An actor's level of cost tolerance can affect both its ability to defeat an adversary militarily and its ability to impose costs on that adversary by acting as a constraint on the number of troops and resources that can be committed, military strategy and battlefield tactics, the intensity of operations, and the modes of force employed. Moreover, each actor's cost-tolerance threshold determines the level of costs at which it would choose to make concessions or abandon its war aims to terminate the conflict.

Uncertainty and War Outcomes

I assume that both state and nonstate actors (e.g., insurgents) select themselves into armed conflicts when they *believe* that the price they are willing to pay to attain their objectives exceeds what it will cost to attain those objectives through the use of force. When actors are uncertain about the human and material costs of attaining their war aims *ex ante*, they are at risk of selecting themselves into long, costly, and ultimately unsuccessful military engagements. The more the actual costs of fighting exceed an actor's prewar expectations, the greater the risk that it will eventually be pushed beyond its cost-tolerance threshold and forced to abandon the war effort before it attains its war aims. At the same time, actors may need to fight longer before they arrive at accurate estimates of what it will cost to attain their objectives when the attributes of a conflict contribute to high levels of uncertainty.

Nothing a rational actor knows about its opponent's ability to impose or absorb costs *before* initiating the use of military force should influence its decision to terminate the war after hostilities have begun. I assume that actors take what is known prior to the war into consideration when they form their beliefs about the probability of victory and the cost of fighting and make the decision to use military force. As a result, destructive capacity and tolerance for costs are important factors, but the essential intervening variable is *miscalculation* on the part of at least one of the actors. The degree of uncertainty about the odds of victory and the costs of war that exists for each actor prior to the decision to use military force is a critical determinant of war outcomes.

Actors may be uncertain about the cost and/or the probability of victory because they do not have complete information about:

1. the latent destructive capacity of their adversary (and therefore the probability of outright military victory or defeat as well as the costs the adversary could impose);
2. the latent destructive capacity of their own state (and therefore the probability of outright military victory or defeat as well as the costs they could impose on the adversary);
3. their adversary's tolerance for costs (and therefore the proportion of capacity the adversary is willing to commit, the costs the adversary can impose, and the costs the adversary will accept before abandoning the war effort), or;
4. their own state's tolerance for costs (and therefore the proportion of capacity they will be able to commit, the costs they can impose, and the costs they can accept before abandoning the war effort).

How difficult the task of estimating the probability and cost of victory is for leaders is likely to be dependent on a large number of factors. Many rationalist theories assume the degree of uncertainty is lower when there is a large power disparity between the warring sides (Bueno de Mesquita et al., 1997; Reed, 2000; Slantchev, 2004). In asymmetric conflicts, leaders can still misestimate their own and/or their adversary's latent military capacity, but the errors are less likely to be great enough to fundamentally alter predictions about battlefield outcomes. However, even in dyads in which capabilities are highly asymmetric, leaders are likely to have difficulty predicting the costs their adversary is willing to bear to attain their objectives. Because they cannot accurately estimate the costs the adversary will accept before abandoning the war effort, even militarily strong states sometimes fail to achieve their objectives in war when they underestimate the cost of victory and select themselves into wars they cannot sustain to victory.

Predicting Military Intervention Duration and Outcome

As Slantchev (2004) notes, beliefs are unobservable. However, while the degree of uncertainty itself cannot be measured, we can test certain observable implications derived from a model in which uncertainty is a critical variable. I expect armed conflicts to be *longer* and actors to be *less likely to prevail* when their leaders are most uncertain about what it will cost to attain their objectives through the use of military force. My focus here is on the ways in which certain characteristics of a conflict affect the accuracy of a national leader's prewar expectations. More specifically, I argue that the degree of uncertainty about the cost of victory depends in large part on the nature of the political objectives a state is pursuing. Uncertainty is highest when states use military force to pursue political objectives that can only be attained with target compliance.

Political Objectives

I develop a typology of political objectives that places the types of political objectives states commonly pursue through the use of military force on a continuum based on the degree of *target compliance* required to attain the objective. Figure 1 illustrates this continuum.¹

At one end of the spectrum, *brute force* political objectives like overthrowing a foreign regime or seizing territory are the least dependent on target compliance because they can be seized and held with overwhelming force alone. As Schelling (1966) notes, "Forcibly a

¹Appendix A provides brief definitions, coding rules, and examples of the political objective categories. A more detailed codebook is available at <http://tsulli.myweb.uga.edu>.

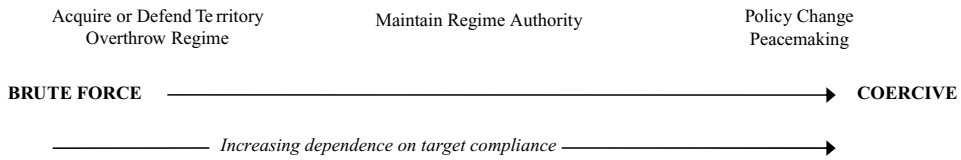


FIGURE 1 Typology of political objectives.

country can repel and expel, penetrate and occupy, seize, exterminate, disarm and disable, confine, deny access, and directly frustrate intrusion or attack” (p. 1). States almost always prefer to attain their objectives without having to physically destroy their adversary because doing so is enormously costly. But, if necessary, a state with sufficient military capacity can seize territory, overthrow a foreign regime, or defend an ally’s borders by completely destroying or disarming the target’s armed forces regardless of the strength of the target’s will to resist or its tolerance for costs.

In contrast, no matter how physically strong it is, a state can only achieve *coercive* objectives if it can gain target compliance. If a state seeks a change in an adversary’s behavior, rather than the elimination of that adversary, the state must persuade the adversary to comply by manipulating the costs and benefits of compliance versus noncompliance. Just as a prisoner cannot be forcibly compelled to provide his captors with intelligence, a regime cannot be physically forced to change its policies toward ethnic minorities within its borders or compelled to stop sponsoring international terrorism. Like the prisoner, the target government must be convinced that the cost of resistance will exceed the price it is willing to pay. When a state seeks to maintain the political authority of its own colonial regime, or that of an ally in a foreign territory, the objective falls somewhere in the middle of the continuum. The state can attempt to erode the insurgents’ capacity to fight, but the population of that territory must eventually be persuaded to withhold or terminate its support for the insurgency because elimination of the insurgent threat is not possible as long as popular support is sufficiently strong (Arreguín-Toft, 2005, 2007; Record, 2005; Record & Terrill, 2004; Mack, 1975; Nagl, 2002; Thompson, 1966).

Both relative *destructive capacity* and relative *cost tolerance* have an effect on the conduct, duration, and outcome of every armed conflict. However, as states become more dependent on target compliance to achieve their objectives, their adversary’s cost tolerance becomes a greater determinant of the cost of victory. And because leaders are more likely to have accurate estimates of their adversary’s destructive capacity than of the costs their adversary would be willing to bear, we can expect estimates of the cost of victory to become less accurate as target cost tolerance becomes a more influential factor. Modern military organizations are reasonably adept at estimating force requirements and even forecasting casualties for conventional campaigns involving direct combat to destroy enemy military forces. But there is much greater uncertainty about how much military force will be required, the manner in which force should be employed, and how long a campaign will need to be sustained when attainment of the primary political objective of an operation is dependent on target compliance. It is difficult to predict how much it will cost to attain an objective when success is dependent upon reaching an inherently unknowable enemy “breaking point” (Mueller, 1980).

When states underestimate the costs of using force to attain their political objectives, they risk being pushed beyond their cost-tolerance threshold and compelled to terminate their war efforts before they attain their war aims. A state can discover that it has insufficient cost tolerance to attain any type of objective after initiating the use of military force. But states with the military capacity to defeat their adversaries are most likely to fail when they

use military force to attain coercive objectives because they are more likely to underestimate the cost of achieving coercive objectives when making the decision to militarize a conflict. As a result, the probability that a strong state will prevail over a weak target declines as the need for target compliance increases.

Hypothesis 1. Militarily preponderant states are less likely to prevail the more compliance-dependent (coercive) their primary political objective.

Because war fighting is tremendously costly, I assume that states prefer short wars to long ones and attempt to avoid not only losing wars, but also protracted fighting. However, when uncertainty about the cost of victory is high, as I argue it is when states pursue coercive political objectives, states should be more likely to select themselves into long, costly wars. At the same time, it will take longer for states' expectations about the cost and outcome of a war to converge when relative cost-tolerance plays a large role in determining the conduct and outcome of the war, as it does in wars with coercive political objectives.

Hypothesis 2. The probability that a military intervention persists into another year increases the more compliance-dependent the intervening state's primary political objective.

Research Design

Data

I test these hypotheses with an original data set of the universe of historical cases of military intervention by the permanent members of the UN Security Council—Britain, China, France, the US, and the USSR/Russia, during the period between 1945 and 2001. I define a military intervention as a use of armed force that involves the official deployment of at least 500 regular military personnel (ground, air, or naval) to attain immediate-term political objectives through action against a foreign adversary. To qualify as a “use of armed force,” the military personnel deployed must either use force or be prepared to use force if they encounter resistance (see Tillema 2001 for a similar definition of “combat readiness”). This definition excludes monetary aid, military training operations, the forward deployment of military troops, noncombatant evacuation operations, and disaster relief. Foreign adversaries can be either states or nonstate actors (e.g., insurgent groups or terrorist organizations). Military operations that target a state's own citizens and are conducted within its internationally recognized borders (e.g., China's use of force against Tiananmen Square protestors in 1989) are not included unless both citizenship and borders are in dispute in territory claimed as national homeland by another ethnic group (e.g., France in Algeria). There are 127 cases of military intervention in the data set.²

The empirical analysis is limited to cases of military intervention by five major power states for both practical and theoretical reasons. Detailed data on the political objectives states have pursued through the use of military force and whether or not those objectives were attained is not readily available for a wider set of cases; however, focusing on major power military interventions has several advantages. The general logic of the theory I present should be applicable to more than just cases of military intervention by powerful states, but it is less complicated to test the theory with these cases because I can make several

²The complete Military Interventions by Powerful States (MIPS) data set and codebook are available at <http://tsulli.myweb.uga.edu>.

simplifying assumptions. Limiting the analysis to powerful states that deploy military troops abroad allows me to assume that the intervening state could always choose to unilaterally terminate its military operations without risking its own survival. This makes the use of decision-theoretic logic more appropriate and I can meaningfully discuss the duration and outcome of these interventions in terms of the intervening state's decision to persist or withdraw. In a broader population of cases, I would need to consider the possibility that even if the conflict initiator has exceeded its cost-tolerance threshold and wants to abandon its war aims to terminate the conflict, it might not be able to because the other actor will not agree to stop fighting (Goemans, 2000). Of course, because the nature of the cases with which the hypotheses are tested is restricted, care must be taken in drawing implications for a broader set of phenomena. All else equal, actors should be more likely to misestimate the cost of attaining objectives that require target compliance because there is generally more uncertainty about an adversary's tolerance for costs than about that adversary's destructive capacity. However, in wars between states with approximate parity in military capabilities, the probability of success and the cost of using military force to attain *brute force* objectives might be just as difficult to predict as the likelihood and cost of victory in the pursuit of *coercive* objectives because their would be greater uncertainty about the costs each side could impose on the other and the probability of outright military victory by one side or the other.

Statistical Methods

I adopt a method of simultaneously modeling war outcome and war duration from Reiter and Stam (2002). In this model, the unit of analysis is the intervention-year and the dependent variable is the intervention-year outcome. In any given year of an intervention, three outcomes are possible: the intervening state can choose to withdraw from the war without attaining its primary political objective (withdraw), the intervening state can choose to sustain military operations into the next year (persist), or the intervening state can terminate the intervention after attaining its primary political objective (prevail). Prevail takes a value of one only when the intervening state attains its primary political objective and that objective is maintained for at least one year after the military intervention is terminated,³ and zero otherwise. This coding rule was adopted so that only interventions which resulted in a meaningful foreign policy achievement were considered "successful." The intervening state chooses to withdraw from the intervention in 13%, the state prevails over its adversary in 21%, and the intervention is sustained into another year in 66% of the 346 major power military intervention-years between 1945 and 2001.

The dependent variable in this analysis is categorical and I use multinomial logit estimation procedures. Using maximum likelihood estimation with a multinomial logit model calculates the odds of one war outcome (persist, prevail, or withdraw) versus another as follows:

$$\Omega_{m|n}(x) = \exp(x\beta_{m|n})$$

where $\Omega_{m|n}(x)$ is the odds of dispute outcome m versus dispute outcome n given x , an array of values for the independent variables. $\beta_{m|n}$ is a vector of coefficients indicating the influence of each explanatory variable on the odds of dispute outcome m versus n (Long, 1997).

³The date of intervention termination is the date that (1) a peace treaty or other agreement between the parties ends the intervening state's combat role, or (2) the intervening state has reduced its combat troop levels to no more than 30% of their level at the height of the conflict.

Structuring the data in this way allows for the possibility that an independent variable affects the odds of sustaining an operation versus withdrawing from the conflict differently than the odds of prevailing versus withdrawing. An independent variable could increase both the probability that the primary political objective is attained in a given intervention-year *and* the probability that the intervening state withdraws without attaining its objective in that intervention-year, while decreasing the probability that intervention persists into the next year. Other variables might increase both the probability of sustaining an operation and the probability of withdrawing, while decreasing the probability that that the intervening state prevails in a given intervention year.

Explanatory Variables

Primary Political Objective

The key explanatory variable is the nature of the intervening state's primary political objective in a given intervention-year. A political objective is defined as the allocation of a valued good (e.g., territory, political authority, or resources) sought by the political leaders of a state or of a nonstate organization. The primary political objective (PPO) of a military intervention is a concrete, observable, immediate-term outcome to be attained through the employment of military force. To facilitate rigorous coding of the political objective of each major power military intervention, I created seven political objective categories based on an historical analysis of approximately 30% of the cases. The seven categories are: Maintain Foreign Regime Authority, Remove Regime, Policy Change, Acquire or Defend Territory, Maintain Empire, Deter Aggression, and Peacemaking. Appendix A contains brief descriptions of the PPO categories and the number of intervention cases in each category. I then used a team of research assistants to code each intervention-year according to the category that best represented the state's primary war aim in that year. Identifying the purposes for which states use force is a challenging endeavor, and the political objectives of a military operation are sometimes ambiguous. I attempted to minimize systematic error and bias by assigning at least two coders to each case, employing a wide range of sources, and focusing on the tangible outcome a state's armed forces was trying to achieve in the short term, rather than on political leaders' rhetoric about the grand strategic rationale or moral justifications for a particular use of force. Coding rules and examples for each of the objective categories are available in the MIPS codebook.

For the multivariate analysis reported here, I create a variable with three categories to capture the nature of the major power state's political objective in each intervention. A state's objective is considered to be "brute force" if its primary war aim is the acquisition or defense of territory, the removal of a foreign regime, or deterring an adversary from using force to acquire territory or overthrow a regime. I code the intervening state's primary political objective as "coercive" if the state is seeking a policy change from a foreign government or is engaged in a peacekeeping operation. Attempting to maintain the political authority of either a foreign government or of one's own colonial government in the face of internal opposition is considered a "mixed" objective. This measure is included in the model as two dummy variables and one excluded category.

Target Type

I expect that states will have more difficulty estimating the destructive capacity and cost tolerance of nonstate adversaries than of other states. States have strategic assets (defensible terrain, military installations, troops, equipment, and industrial and communications centers) that are relatively easy to monitor and that can be destroyed, degraded, or captured by the armed forces of strong states. The destructive capacity of nonstate actors like terrorist

organizations and insurgents is more difficult to estimate because they have small, mobile strategic assets, limited resource requirements, and readily concealable leadership, supply, and communication infrastructure (Worley, 2003). Moreover, while the extent of any target's tolerance for costs is inherently unknowable, the cost tolerance of nonstate actors is expected to be particularly difficult to estimate. Intervening states should be more likely to select themselves into long and ultimately unsuccessful military interventions when their adversary is a nonstate actor because prewar uncertainty about the cost of attaining their objectives should be higher when the adversary is a nonstate actor. At the same time, states may have to fight terrorists and insurgents for a longer period of time before they have enough information to generate accurate estimates of the cost of attaining their objectives. Finally, even if the belligerents' expectations about the cost and likelihood of ultimate victory converge, armed conflicts with nonstate targets may continue because nonstate actors cannot credibly commit to a negotiated settlement (Blanken & Gartner, 2005; Fearon, 1995). A dummy variable indicates that the target was not a state. Forty-six percent of the targets of the major power military interventions since 1945 were nonstate actors like terrorist organizations, guerilla armies, or civilians.

Counterintervention

States make the decision to use military force to attain their objectives when they believe the price they are willing to pay to secure those objectives exceeds the human, material, and opportunity costs of attaining those objectives by force. If the target of a state's military operations receives military assistance that the state failed to anticipate before hostilities commenced, it may be forced to revise its estimate of the probability of prevailing and the cost of victory when that assistance arrives (Gartner & Siverson, 1996). I expect that in any given intervention-year intervening states will be more likely to withdraw their troops without attaining their primary political objective, less likely to sustain their military operations into another year, and less likely to prevail if a rival major power intervenes in the conflict after hostilities commence. I create a variable to indicate direct military assistance provided to the target by another major power (*counterintervention*).

Local Government Ally

Major power military interventions are often characterized by a balance of cost-tolerance that favors the target (Mack, 1975; Record, 2005; Record & Terrill, 2004; Sullivan, 2007). Weak actors tend to resist much stronger adversaries only when their value for the issues at stake is exceptionally high. But a state with a considerable capability advantage over its opponent can choose to escalate a conflict to violence with a much lower cost-tolerance threshold because the costs that can be imposed on it by a weak actor are relatively low. When a strong state intervenes to assist another state, the local government is much less likely to be disadvantaged by low tolerance for costs. As a result, an intervening state may be able to shift the burden of many of the costs of a war to the local government, lowering its own costs and decreasing the probability that it will exceed its cost-tolerance threshold and withdraw from the conflict without achieving its objectives. On the other hand, while states know whether or not they will have a local government ally before initiating the use of military force, they may not know how fighting with this ally will affect their ability to impose or absorb costs. If states systematically overestimate the contributions of local allies *ex ante*, the interventions on behalf of a government we observe could be less likely to succeed. A dummy variable indicates whether or not the intervening state had a local government ally.

Troop Commitment

Asymmetric conflicts are characterized by vast asymmetries in not only capabilities, but also interests at stake, and, by extension, the proportion of total capabilities each side is willing to commit to the conflict. Variations in major power commitment levels are likely to affect both the duration and outcome of military interventions. I control for the degree of major power resource commitment by including variables that indicate the number of troops the intervening state has committed and whether or not ground combat troops were deployed in each intervention-year. I use the natural log of the number of major power troops deployed to the conflict location in the statistical analysis. A dummy variable indicates that the major power deployed ground troops rather than relying on air or sea power.

Time

Intervention-year outcomes may be duration dependent in the sense that the length of time that an intervention has been ongoing affects the probability that the intervening state will attain its objectives or withdraw its troops in a given intervention-year (Reiter & Stam, 2002). Interventions that have been ongoing for many years may be less likely to terminate in either withdrawal or victory and more likely to persist into another year. Alternatively, intervening states may become more likely to withdraw their troops without attaining their objectives over time. I control for time by including a variable that indicates how many years the interventions has been ongoing for each intervention-year.

Results

Table 1 presents a multinomial logit estimation of an equation predicting the outcome of each of the major power military intervention-years since World War II. There are two sets of coefficient estimates. Coefficients in the first column estimate the effects of the independent variables on the likelihood that the intervention terminates when the intervening state chooses to withdraw from the intervention without attaining its war aims rather than sustaining military operations into the next year. In the second column, coefficients indicate the effect of each independent variable on the likelihood that the intervening state prevails, compared to the likelihood that the interventions persists. Positive coefficients indicate that increases in a given variable raise the likelihood of a given intervention-year outcome, relative to the base category (persist), while negative coefficients signify that the variable decreases the likelihood of that outcome, relative to the base category. Estimates of the effects of each of the explanatory variables on the probability of withdraw versus prevail can be attained directly from these coefficient estimates.

The overall fit of the model is reasonably good. The model correctly predicts 74% of intervention-year outcomes, 23% more than can be predicted by choosing the modal outcome category, persist. Hausman tests of the Independence of Irrelevant Alternatives (IIA) assumption indicate that all three outcome categories are independent of other alternatives. Likelihood ratio tests confirm that none of the outcome categories should be combined. Because multinomial logit estimation produces multiple coefficient estimates for each independent variable—one for every possible outcome category pairing—it is difficult to determine whether a particular variable has a statistically significant effect on any of the outcome categories from the coefficient and standard error estimates reported in the table. In columns three and four, I report the results from a series of likelihood-ratio tests, each of which compares the log likelihood from the full model to the log likelihood from a constrained model in which one independent variable is excluded. Coefficients on the key explanatory variables, coercive and mixed, are statistically significant at $p < 0.01$. The variable indicating that the target is a nonstate actor and the variable measuring the number

TABLE 1 Multinomial logit model of intervention-year outcomes*

	Withdraw vs. Persist	Prevail vs. Persist	LR $\chi^2(2)$	Prob> χ^2 [†]
Coercive primary political objective	1.285 (2.30)	-1.478 (2.70)	19.50	0.000
Mixed primary political objective	0.197 (0.37)	-1.278 (3.49)	14.01	0.001
Nonstate target	-0.278 (0.62)	-0.766 (2.14)	4.71	0.095
Local government ally	-1.435 (3.12)	0.775 (2.45)	22.63	0.000
Counterintervention	2.879 (3.22)	-1.597 (1.35)	19.19	0.000
Number of troops committed (logged)	-0.151 (1.46)	-0.177 (2.06)	5.68	0.058
Ground troops	0.863 (1.82)	0.802 (2.23)	7.68	0.022
Duration in years	-0.12 (2.46)	-0.122 (2.79)	15.57	0.000
Constant	-0.305 (0.28)	1.201 (1.43)		
Intervention-years (<i>N</i>)	349			
Unique interventions	122			
LR $\chi^2(16)$	117.94			
Prob> χ^2	0.000			
Adjusted count R^2	.233			

*Absolute value of z statistics in parentheses.

[†]H₀: All coefficients associated with a given variable are zero.

of intervening state troops deployed are significant at $p < 0.10$. All other variables are significant at $p < 0.05$.⁴

Table 2 shows the effect of each variable on the predicted probability of each intervention-year outcome, holding all other variables constant at their median values. Because uncertainty about the cost of victory is highest when states are dependent on target compliance to attain their war aims, my hypotheses predicted that military interventions would be longer and the intervening state would be less likely to prevail when the state used military force to attain more coercive political objectives. Although uncertainty is unobservable, the results of this analysis are consistent with these predictions. The probability that an intervening state will prevail in a given intervention-year declines by 32% when the primary political objective is coercive rather than brute force, and by 25% when the PPO is moderately dependent on target compliance (i.e., mixed). At the same time, the probability that the state will withdraw from the conflict without attaining its objectives increases by

⁴I also use this method to test whether the intervening state's proportion of the conflict dyad's military-industrial capabilities (Singer et al., 1972; Jones et al., 1996) affects the relative likelihood of any of the intervention outcomes. The variable falls far short of statistical significance ($p = 0.29$) and does not significantly improve the fit of the model or change the coefficient estimates on the key explanatory variables. Relative military capabilities is not included in the model presented in the tables.

TABLE 2 Effect of each independent variable on the probability of each outcome category*

Variable	Δ in Variable	Δ in Pr(Withdraw)	Δ in Pr(Prevail)	Δ in Pr(Persist)
Coercive primary political objective	0 → 1	+0.32	-0.32	-0.00
Mixed primary political objective	0 → 1	+0.08	-0.25	+0.17
Nonstate target	0 → 1	-0.03	-0.07	+0.10
Local government ally	0 → 1	-0.16	+0.17	-0.02
Counterintervention	0 → 1	+0.64	-0.15	-0.49
Number of troops committed (logged)	+/- sd/2	-0.04	-0.04	+0.07
Ground troops	0 → 1	+0.10	+0.07	-0.16
Duration in years	+/- sd/2	-0.09	-0.06	+0.15

*N = 349 intervention-years. Changes in the predicted probability of each outcome are calculated when all variables but the variable of interest are held constant at their median values. sd = standard deviation.

32% when the state pursues a coercive political objective, and by 8% when the state pursues a mixed objective. Military interventions with moderately coercive objectives are 17% more likely than interventions with brute force objectives to persist into another year.

We might also expect that using military force against a nonstate actor would increase a state’s uncertainty about the cost of victory. If so, states should be less likely to prevail and more likely to either continue fighting or withdraw their troops in a given intervention-year when they are fighting a guerilla insurgency or terrorist organization rather than a state. Military interventions that target nonstate actors could also be difficult to terminate because nonstate actors are frequently unable to make a credible commitment to uphold the terms of a negotiated settlement. The results of this analysis indicate that intervening states are 3% less likely to withdraw and 7% less likely to attain their primary political objectives in a given intervention-year, and that military operations are 10% more likely to persist into another year when the target is not a state.

Table 3 contains the predicted probability of each intervention-year outcome as the nature of the target and the nature of the intervening state’s primary political objective varies and all other variables are held constant at their median values. Major power states are most likely to attain their objectives in a given intervention-year when they pursue brute force objectives like regime change or the defense of territory against state adversaries (e.g., France versus the Bokassa regime in CAR, 1979, or U.S. Operation Dessert Storm, 1991). Major power states are most likely to unilaterally withdraw from an intervention, and

TABLE 3 The predicted probability of each intervention-year outcome varying target and objective type

Target	Coercive Objective		Brute Force Objective	
Nonstate	Withdraw	0.40	Withdraw	0.12
	Prevail	0.05	Prevail	0.26
	Persist	0.55	Persist	0.62
State	Withdraw	0.44	Withdraw	0.12
	Prevail	0.09	Prevail	0.41
	Persist	0.46	Persist	0.47

least likely to attain their primary political objectives, when they have coercive objectives, regardless of the nature of the target. Examples include US peacekeeping operations in Lebanon from 1983 to 1984 and Chinese attempts to coerce Vietnam into withdrawing from Cambodia in 1979.

In addition to target and objective type, a number of other factors have a significant effect on intervention-year outcomes. Intervening on behalf of a state ally increases the likelihood of prevailing by about 17% and decreases the likelihood of withdrawing short of victory by about 16% in a given intervention-year. The results of the analysis also indicate that intervention-year outcomes are time dependent. The longer an intervention has persisted, the more likely it is that the intervention will persist into yet another year. Major power states become both less likely to prevail and less likely to withdraw from the conflict without attaining their objectives as time passes. Troop commitment levels have a similar effect; as the number of troops an intervening state deploys increases, the state becomes less likely to either succeed or fail and more likely to keep fighting. However, committing ground troops increases the probability of an intervention terminating in either withdrawal or attainment of the state's primary political objective and decreases the duration of interventions.

Finally, when a rival major power intervenes on behalf of the target of a major power military intervention, the probability of withdrawal dramatically increases and the probability that the initial intervening state either attains its war aims or sustains its military operations into another year drops precipitously. When all independent variables are set to their median values, the probability that a state will abandon its objectives and unilaterally withdraw its military forces is just 20%. If a rival major power intervenes in the conflict, the probability of withdrawal shoots up to over 84% and the probability of prevailing decreases from 16% to less than 2%. The results are both intuitive and instructive. When making the decision to use military force to achieve a foreign policy objective, major power states rely on estimates of both the probability of attaining their objectives and the cost of doing so. When costs are sufficiently low and the probability of victory is sufficiently high, the expected utility of war can exceed the value of the status quo even when the utility of the objective is only moderate. And strong states can expect that their costs will be relatively low when their target is a militarily weak state or nonstate actor. However, when a rival with military capabilities comparable to its own commits troops, a major power is likely to lower its estimate of the probability of victory and radically increase its estimate of the cost of attaining its objectives. When the calculus changes this dramatically, states are likely to quickly seek to terminate the conflict.

Conclusion

Many theories of asymmetric war outcomes suggest that strong states should be most likely to fail when their absolute tolerance for costs (i.e., resolve) is lowest or when the gap between their tolerance for costs and the cost-tolerance of their adversary is greatest (Mack, 1975; Maoz, 1983; Rosen, 1972). But powerful states do not lose small wars simply because they have low absolute or relative levels of cost tolerance. The cost tolerance of strong states does not need to exceed or even match that of their weak targets in order to prevail over them because their strength ensures that the human and material costs of war will be borne much more heavily by the target. In fact, I find that strong states are *most* likely to attain quick victory when they seek to overthrow a foreign regime or acquire territory, where we can assume the issues at stake for the target are extraordinarily salient. And there is no evidence that higher troop commitment levels, which could be seen as an *ex post* indicator of a state's resolve, increase the odds that the intervening state will prevail or decrease the duration of military interventions.

The military operations of powerful states are likely to fail only if the state's decision makers initially underestimate the cost of achieving their objectives. The key relationship, then, is not the distance between the strong state's cost tolerance threshold and the cost tolerance of a weak adversary, but the distance between the *price the strong state is willing to pay* and the *actual human and material cost* of attaining its political objectives through the use of force. I argue that powerful states are more likely to unilaterally withdraw from foreign military interventions short of victory when the state's decision makers initially underestimate the cost of achieving their political objectives through the use of force, and that the risk of underestimating the cost of sustaining a military operation to victory is highest when strong states pursue coercive war aims.

Hypotheses on the effects of a strong state's primary political objective on the probability that it will attain its objectives, abandon its war aims and withdraw from the conflict, or sustain its military operations into another year are strongly supported by the analysis and the model is able to predict almost 75% of intervention-year outcomes. Major power military interventions with "brute force" political objectives last an average of 15 months and 75% are successful. When major power states use military force in an attempt to attain objectives that are dependent on target compliance, their military interventions last an average of 36 months and the primary political objective is eventually attained in less than 50% of the cases. Brute force objectives are not "easier" to attain in the sense of requiring less military force or costing fewer lives. In fact, securing these objectives generally requires a greater effort and entails higher costs. But uncertainty about the cost of attaining brute force objectives is low compared to the level of uncertainty about the human and material cost of attaining objectives that are dependent on target compliance. Because there is less uncertainty about the cost of attaining brute force objectives, states are less likely to choose to use force with insufficient cost-tolerance to sustain military operations to victory.

Acknowledgments

This article briefly summarizes portions of chapters 2 and 5 of the author's dissertation, which was the recipient of the 2004–2006 Walter Isard Award for the Best Dissertation in Peace Science, given by the Peace Science Society (International). This research was supported by grants from the National Science Foundation (SES 0242022) and the Institute on Global Conflict and Cooperation (IGCC). The author is grateful to her dissertation committee—Scott Gartner, Robert Jackman, and Josephine Andrews—for their exceptional advice and support throughout the process. In addition, Ivan Arreguín-Toft, Scott Bennett, Hein Goemans, John Mearsheimer, and participants in both the Triangle Institute for National Security Studies' Fifth Annual New Faces Conference and the 2007 Journeys in World Politics workshop provided valuable feedback on the project at various stages. Especially astute comments by two anonymous reviewers of this article greatly improved the final product, but I stubbornly refused to follow all of their advice and any remaining ambiguities or outright errors are entirely my own.

References

- Arreguín-Toft, I. 2005. *How the weak win wars: A theory of asymmetric conflict*. New York: Cambridge University Press.
- Arreguín-Toft, I. 2007. How to lose a war on terror: A comparative analysis of a counterinsurgency success and failure. In Angstrom, J. and Duyvesteyn, I., eds. *Understanding victory and defeat in contemporary war*. New York, NY: Routledge.
- Biddle, S. 2004. *Military power: Explaining victory and defeat in modern battle*. Princeton: Princeton University Press.
- Blainey, G. 1973. *The causes of war*. New York: Free Press.

- Blanken, L. and S. S. Gartner. 2005. *Needing an arm to twist: Conquest vs. commerce in asymmetric dyads, the role of institutions*. Presented at the American Political Science Association Annual Meeting. Washington, DC.
- Bueno de Mesquita, B., J. D. Morrow, and E. R. Zorick. 1997. Capabilities, perception, and escalation. *American Political Science Review* 91 (1): 15.
- Fearon, J. D. 1995. Rationalist explanations for war. *International Organization* 49(3): 379–414.
- Filson, D., and S. Werner. 2002. A bargaining model of war and peace: Anticipating the onset, duration, and outcome of war. *American Journal of Political Science* 46 (4): 819.
- Gartner, S. S., and R. M. Siverson. 1996. War expansion and war outcome. *Journal of Conflict Resolution* 40 (1): 4–15.
- Goemans, H. E. 2000. *War and punishment: The causes of war termination and the First World War*, *Princeton studies in international history and politics*. Princeton, NJ: Princeton University Press.
- Jervis, R. 1988. War and misperception. *Journal of Interdisciplinary History* 18 (4): 675–700.
- Johnson, D. D. P. 2004. *Overconfidence and war: The havoc and glory of positive illusions*. Cambridge: Harvard University Press.
- Long, J. S. 1997. *Regression models for categorical and limited dependent variables*. Thousand Oaks, CA: Sage.
- Mack, A. 1975. Why big nations lose small wars: The politics of asymmetric conflict. *World Politics* 27 (2): 175–200.
- Maoz, Z. 1983. Resolve, capabilities, and the outcomes of interstate disputes, 1816–1976. *Journal of Conflict Resolution* 27 (2): 195–229.
- Millett, A. R. W. Murray, and K. H. Watman. 1988. The Effectiveness of Military Organizations. In Millett, A. R. and W. Murray, eds. *Military Effectiveness; Volume I: The First World War*, Boston: Allen & Unwin.
- Mueller, J. E. 1980. The search for the “breaking point” in Vietnam: The statistics of a deadly quarrel. *International Studies Quarterly* 24 (4): 497–519.
- Nagl, J. A. 2002. *Counterinsurgency lessons from Malaya and Vietnam: Learning to eat soup with a knife*. Westport, CT: Praeger.
- Powell, R. 2004. Bargaining and learning while fighting. *American Journal of Political Science* 48 (2): 344–361.
- Record, J. 2005. Why the strong lose. *Parameters* (Winter): 16–31.
- Record, J. and W. A. Terrill. 2004. *Iraq and Vietnam: Differences, similarities, and insights*. Carlisle, PA: Strategic Studies Institute.
- Reed, William. 2000. A unified statistical model of conflict onset and escalation. *American Journal of Political Science* 44 (1): 84.
- Reiter, D. and A. C. Stam. 2002. *Democracies at war*. Princeton: Princeton University Press.
- Rosen, S. 1972. War power and the willingness to suffer. In B. M. Russett, ed. *Peace, war, and numbers*. Beverly Hills CA: Sage Publications.
- Schelling, T. C. 1966. *Arms and influence*. New Haven: Yale University Press.
- Slantchev, B. 2003. The principle of convergence in wartime negotiations. *American Political Science Review* 97 (4): 621–632.
- Slantchev, B. 2004. How initiators end their wars: The duration of warfare and the terms of peace. *American Journal of Political Science* 48 (4): 813–829.
- Stam, A. C. 1996. *Win, lose, or draw: Domestic politics and the crucible of war*. Ann Arbor: University of Michigan Press.
- Sullivan, P. 2007. War aims and war outcomes: Why powerful states lose limited wars. *Journal of Conflict Resolution* 51 (3): 496–524.
- Thompson, R. G. K. 1966. *Defeating communist insurgency: Experiences from Malaya and Vietnam*. London: Chatto & Windus.
- Tilemma, H. 2001. Overt military intervention and international conflict. Paper read at Uppsala Conference on Conflict Data, June 8–9, at Uppsala, Sweden.
- Van Evera, S. 1999. *Causes of war: Power and the roots of conflict*. Ithaca: Cornell University Press.
- Wagner, H. 2000. Bargaining and war. *American Journal of Political Science* 44 (3): 469–484.
- Worley, R. D. Waging Ancient War: Limits on Preemptive Force. *Strategic Studies Institute* (February 2003). <http://www.carlisle.army.mil/ssi/pubs/2003/ancient/ancient.html>

Appendix A: Political Objective Categories

Maintain Foreign Regime Authority

The preservation of the governing authority of an incumbent regime in another state, including both operations to assist a foreign government with the elimination of a domestic insurgent threat and operations to defend a foreign government against an external threat. Examples: US operations in Vietnam (1961–1973), British interventions in Jordan (1958) and Brunei (1962–1963), French operations in Chad (1968–1992), and the Soviet interventions in Sudan (1970–1971) and Afghanistan (1979–1989) (33 interventions).

Remove Foreign Regime

Military force employed with the intention of removing an incumbent regime. Examples: France in the Central African Republic (1979), the Soviet Union in Hungary (1956), and the US in the Dominican Republic (1961–1962), Grenada (1983), Panama (1989–1990), and Afghanistan (2001–2002) (12 interventions).

Maintain Empire

The intervening state sought to re-assert or maintain its own political authority over territory claimed as national homeland by another ethnic group. Examples: French and British interventions in 1950s and 1960s in places from Indonesia to Morocco. The Soviet Union's interventions in East Germany (1948–1953), and Chechnya (1994–1996) (16 interventions).

Acquire or Defend Territory

Cases are coded as territorial only if a piece of land, rather than political authority over an entire nation, is in dispute. States used military force to both defend and acquire territory. Examples: US intervention to protect Honduran territory (and Contra bases) against Nicaraguan raids (1988) and Soviet assistance to Egypt in its 1970 war with Israel (28 interventions).

Policy Change

The PPO of an intervention is only policy change when the intervening state wants the targeted adversary to change an objectionable policy of its own accord. Military force is used not to seize territory, remove a leader, or physically protect a minority group, but in an attempt to coerce the adversary into changing its behavior. Examples: In 1979, the Chinese government seized Vietnamese territory and used long-range shelling, artillery and air strikes against Vietnam with the aim of coercing the government into withdrawing from Cambodia. In April 1946, the Soviet Union mobilized nearly 100,000 troops on its border with Turkey in an effort to gain concessions from the Turkish government (16 interventions).

Deter Aggression

The intervening state seeks to dissuade an adversary from taking an aggressive action it has not already taken. Examples: In December 1965, the British sent an aircraft carrier and Royal Air Force squadrons to Zambia to deter a threatened invasion from South Rhodesia (Zimbabwe). The U.S. sent aircraft carrier battle groups into the Taiwan Strait in 1954,

1958, and 1996 in an effort to deter Chinese aggression against Taiwan and other offshore islands (11 interventions).

Peacemaking

Military force is used to protect civilians from violence and/or other human rights abuses; restore social order in a situation of unrest (e.g., violent protests, rioting, looting); or to suppress violence between armed groups within another state. Examples: British operations in Swaziland (1963–1966) to quell rioting and maintain order, the British intervention in Cyprus (1963–1964) to deter violence and maintain the status quo between the Greek and Turkish communities, and the Russian intervention in Azerbaijan to suppress violence against the Armenian minority (1990) (6 interventions).