The Effectiveness of Leadership Decapitation in Counterinsurgency

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Leadership decapitation is a high-profile tactic that involves the capture or killing of top insurgent leaders. It is frequently used against guerrilla insurgencies: in the past two centuries, top insurgent leaders have been killed or captured in just under 50 percent of counterinsurgency campaigns.[1] Yet we know little about the nature of the relationship between leadership decapitation and counterinsurgency effectiveness. Is capturing or killing insurgencies' leader(s) an effective tactic? Or is it counterproductive, radicalizing insurgent movements, strengthening their resolve, and making them more difficult to defeat? Or does it have no effect at all?

The general consensus is that leadership decapitation of guerrilla groups is ineffective.[2] These conclusions should give scholars pause: they are based on unsystematic research designs, minimal empirical data, and incomparable units--usually terrorist organizations or foreign leaders.

I argue that leadership decapitation is effective. Decapitation provides numerous marginal benefits, weakening and disrupting insurgent organizations and making them more likely to be defeated. This argument is tested using a multi-method approach that draws on a new dataset of 168 insurgencies (1803-1899) and case studies of the Tyrol insurgency (1809) and the U.S.-Philippines War (1899-1902). The paper proceeds in seven parts. First, I discuss the existing literature on leadership decapitation. Second, I critique the uncritical application of previous insights on

[1] To be exact, leadership decapitation has occurred in 70 out of 155 counterinsurgency campaigns for which I have data, or 45.2 percent of the time.

[2] Pape 1996; 2003; Hoffman 2006; Jordan forthcoming; Hosmer 2001; and Staniland 2005.

methodological and analytical grounds. Third, I present an alternative logic that explains why decapitation is more effective than commonly thought. The theory generates three testable hypotheses. Fourth, I discuss alternative explanations. Fifth, I elaborate my empirical strategy for testing the hypotheses. Sixth, I discuss the results of the analysis. Seventh, and finally, I discuss the policy and academic implications of the study.

Does Leadership Decapitation Work? Insights from Interstate War and Counterterrorism

Small existing literatures examine the effectiveness of leadership decapitation in interstate wars and counterterrorism campaigns. In these literature there is near consensus that leadership decapitation is ineffective. In the literature on interstate war, Stephen Hosmer concludes that with a few exceptions, targeting foreign leaders is generally ineffective.[3] Robert Pape comes to a similar conclusion. Pape argues that the elimination of enemy leadership in interstate bombing campaigns "has never been effective."[4] Not only is decapitation ineffective, argues Pape, it can also be counterproductive. Earlier studies came to this same conclusion, suggesting that assassinating foreign leaders is militarily ineffectual and politically counterproductive .[5] For example, Ford argues that assassinations of foreign leaders hardly ever help their doers achieve their aims.[6] The lone exception is a more systematic study by Jones and Olken, which finds that the assassination of foreign leaders is correlated with hastening the end of large-scale wars.[7]

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[3] Hosmer 2001.

[4] One possible exception is the 1986 U.S. bombing that targeted Muammar Qaddafi in Operation El Dorado Canyon. The attack, which failed to kill Qaddafi but killed his daughter, reportedly altered Qaddafi's support for terrorism. As reported by the U.S. State Department, the number of terrorist incidents involving Libya dropped from 19 in 1986 to 6 each in 1987 and 1988. See Hosmer 2001, 27-29. However, Hoffman (1999, 264) argues that Operation El Dorado Canyon had little effect on Qaddafi's behavior.

[5] Havens, Leiden, and Schmitt 1970, 148-49

[6] Ford 1985, 387.

[7] Jones and Olken 2007, 4.

Specific findings in the terrorism literature are more mixed. However, terrorism scholars' broader conclusions are that leadership decapitation does not work. Some scholars suggest that decapitation can help counter terrorism, but only in a limited set of propitious conditions.[8] Audrey Kurth Cronin is perhaps the most optimistic, noting that while leadership decapitation led to the collapse of high-profile terrorist organizations like the Real IRA and Aum Shinrikyo, "the killing of a terrorist leader may backfire."[9] Daniel Byman likewise does not rule out the possibility that decapitation can help in certain situations, but he finds that the number of Hamas attacks increased, not decreased, following the killing of Hamas leaders.[10] Stephen David also downplays the effectiveness of Israeli targeted killings but suggests that targeted killings are useful in other ways, especially for providing retribution and revenge for a population under siege by terrorist attacks.[11] Pape suggests that "although decapitation of suicide terrorist organizations can disrupt their operations temporarily, it rarely yields long-term gains."[12] Jenna Jordan's empirical research also suggests that on average, decapitation is an ineffective counterterrorism strategy.[13]

Surprisingly, there has been almost no analysis of leadership decapitation in the context of guerrilla insurgency. Yet counterinsurgency analysts have uncritically adopted the assumption that leadership decapitation does not work. For example, David Galula's study of French counterinsurgency in Algeria concludes that the decapitation of top FLN leaders "had little effect on the direction of the rebellion."[14] Referring to the "fallacy" of decapitation,[15] terrorism scholar

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[8] Jordan forthcoming; Freeman 2009; and Hoffman 2009.

[9] Kurth Cronin 2006, 22.

[10] Byman 2006.

[11] David 2002, 1-2.

[12] Pape 2003, 356.

[13] Jordan forthcoming.

[14] Galula 2006 (2nd ed.), 141

[15] Hoffman 2006, vi.

Bruce Hoffman asserts that decapitation strategies "have rarely worked" against insurgencies. Likewise, in his study of transnational insurgencies, Paul Staniland does not deny that decapitation can help but argues that decapitation is "too limited and risky a strategy to form the centerpiece of a counterinsurgency campaign." Staniland argues that decapitation is "sorely incomplete as a stand-alone policy."[16]

In sum, the received wisdom is that leadership decapitation does not work.

H1: Leadership decapitation does not make counterinsurgents more likely to win, and it may make them more likely to lose.

Problems with this Argument

Existing studies agree that leadership decapitation does not work, but there is little empirical basis for such a claim. Four methodological problems and three theoretical problems in the small existing literature limit our knowledge.

First, there has been almost no systematic empirical analysis of the effectiveness of leadership decapitation in any type of conflict.[17] The lacuna is especially large in the study of insurgency. There has been literally no systematic study of leadership decapitation, largely because of a lack of existing data on counterinsurgency campaigns. Jordan's and Mannes' studies of decapitation of terrorist organizations provide insight into the question in the context of terrorism,[18] but a gaping hole in our knowledge about decapitation remains to be filled in the context of counterinsurgency.

Second, inferences drawn from case study analysis tend to be plagued by selection bias and inferential fallacies. Depending on their argument, scholars have often drawn their conclusions from

[16] Staniland 2005, 27-29.

[17] For an exception, see Jordan forthcoming.

[18] Jordan forthcoming; and Mannes (2008).

hand-picked cases that are either the easiest or the hardest cases for decapitation to be effective in.[19] While this form of selection bias is useful for generating hypotheses and testing the explanatory power of a particular variable in a particular case,[20] it limits scholars' ability to make precise, qualified inferences about the general effectiveness of decapitation. Indeed, drawing general conclusions about a theory based on the cases from which the theory was derived often descends to tautology.

A third methodological issue is that previous research sets an unrealistically high bar for decapitation to be considered a "success." Consequently, it likely underestimates the actual utility of leadership decapitation. If the decapitation of a leader failed to lead to the immediate collapse of an organization, scholars have often coded decapitation as a failure (Hosmer 2001; Hoffman 2007). While this may be a reasonable way to assess the proximate effect of decapitation, it is an unreasonable way of assessing the longer-term effects of decapitation on insurgent capacity. It is possible that decapitation has the systematic effect of weakening insurgent organizations over time, therefore making them more likely to be defeated than groups that do not suffer decapitation. Large-*N* statistical analysis is necessary to test this possibility.

Fourth, previous research has failed to adequately identify and include negative cases in analyses of decapitation's effectiveness.[21] Are counterinsurgents more likely to win cases in which they decapitate insurgencies' leadership than when they do not? We do not know: omission of negative cases has rendered this question unanswerable. Allowing the independent variable to vary is a basic yet significant methodological advance in the study of leadership decapitation's effectiveness.

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[19] (e.g., Hosmer 2001; Hoffman 2007). To be fair, these scholars often try to use these cases to draw analogies between particular situations. As useful as analogical reasoning can be, it is not a good method for getting inferential leverage about the effectiveness of leadership decapitation.

[20] Mahoney and Goertz 2006.

[21] For an exception, see Jordan forthcoming.

In addition to these methodological issues, the theoretical logic linking decapitation to ineffectiveness rests on three questionable assumptions.

The first questionable assumption is that insurgent organizations are durable and resilient.[22] In this view, removing top leaders has little effect on insurgents' ability or willingness to continue their campaigns, either because leaders can easily be replaced or because they are not integral to the success of the organization.[23] Yet while this is doubtless the case in a handful of extraordinarily successful insurgent organizations such as the Asian communist insurgencies of the middle 20th century,[24] many--perhaps most--violent sub-state groups are not insulated from the shock of losing key leaders by robust organizational structures or legal-rational institutions. On the contrary, many violent non-state groups are poorly-organized, small-scale organizations that are heavily reliant on the skills, capacity, and charisma of individual leaders,[25] as in the case of the Sri Lankan JVP.

The second questionable assumption is that leadership decapitation has a "martyrdom effect" that undermines counterinsurgency. This assumption suggests that decapitation actually breeds anger and resentment that offsets the positive gains of eliminating a group's leaders, as evidenced by cases like that of Che Guevara.[26] Rather than acquiescence, the emotional reaction provoked by decapitation is enhanced resistance as organizational subordinates rally around their fallen leader(s).[27] Yet while it is seductive to muse about the potential consequences of the emotional reaction provoked by decapitation, most social science research on insurgencies suggests that insurgents make decisions according to strategic calculations about the risks and benefits of

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[22] On variations in insurgent organization, see Weinstein 2006. See also Johnston 2008.

[23] Sageman 2008.

[24] The logic of the argument may also be useful for thinking about decapitation of foreign governments, which are more likely to have durable institutions and structures that can weather the disruption caused by the death or imprisonment of their top leadership.

[25] Abrahms 2007.

[26] Kurth Cronin 2006, 22.

[27] Langdon, Sarapu, and Wells 2004.

doing so, not according to their emotions.[28] Although the killing or capture of a guerrilla leader can lead to outcries against the counterinsurgent, it can also signal the incumbent's strength and capabilities, signaling that remaining followers will be the next to fall if they continue the rebellion.[29]

The third questionable assumption is that by causing enemy organizations to decentralize, leadership decapitation makes them *more* difficult to defeat. The assumption here is that as organizations become less hierarchical, they evolve into localized, cell-based groups that can persist long after other nodes of the organization are eliminated, as may have been the case following the killing of al-Qaeda in Iraq insurgent leader Abu Musab al-Zarqawi. Yet it is unclear whether or not this is a common outcome of decapitation. One might expect the opposite: that rifts in insurgencies, which leadership decapitation can be a cause of, lead groups to become weaker and more susceptible to counterinsurgency, as has been suggested about terrorist organizations.[30]

In sum, the conventional wisdom suggests that leadership decapitation does not work, yet methodological flaws and a questionable theoretical apparatus limit our current knowledge about the effectiveness of decapitation. Political scientists have neglected an alternative set of ideas--that leadership decapitation is effective. In the next section, I develop an alternative theory based on this premise.

The Effectiveness of Leadership Decapitation

I argue that leadership decapitation is effective. Leadership decapitation can be linked to counterinsurgency success in four ways.

First, killing or capturing a charismatic insurgent leader can break the morale or the will of his followers to continue the fight. Existing literature on insurgent mobilization emphasizes a

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[28] Kalyvas 2006; and Weinstein 2006.

[29] Indeed, at least one empirical study in the terrorism literature. See Landgon, Sarapu, and Wells 2004.

[30] Bueno de Mesquita 2005.

collective action problem in generating participation in rebellion.[31] Although there are numerous ways in which collective action problems can be overcome, a charismatic leader who can appeal to social norms and networks is one.[32] Removing influential leaders can likewise undermine collective participation in insurgency. Where followers are motivated by a desire to please and obey the leader, removing the leader can weaken the insurgency. Darul Islam insurgents in Indonesia, for example, believed in the "magical" qualities of their leader, Kartosuwiryo. After Kartosuwiryo was killed, the insurgency quickly collapsed.[33] Likewise, rebellion in Burma was put down after Burmese insurgent leader Saya San, a medicine man and shaman who attracted personal support for the rebellion through millenarian expectations and ritualistic practices, was executed in November 1931.[34]

Second, killing or capturing an insurgency's leaders can eliminate radicals and leave the group in the hands of more moderate leaders. Empowering moderates at the expense of leaders has always been a classic counterinsurgency and counterterrorism strategy. Although such a strategy is often pursued through negotiations with moderates rather than killing of extremists, the expected benefit of each is analytically similar.[35] Changing a group's leadership from extremist to moderate can lead militants to put down their arms. Decapitation of an extremist leader helped pacify Burma during the Second Anglo-Burmese War in the 1850s. The British helped the Burmese heir to the throne, Mindon Min, overthrow his half brother, King Pagan Min. Mindon sued for peace and accepted British rule in exchange for local power.[36]

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[31] Lichbach 1998; Popkin 1979; Petersen 2001; Wood 2003; and Weinstein 2005. For a dissenting view, see Kalyvas and Kocher 2007.

[32] Petersen 2001.

[33] Gelman Taylor 2004, 301-303.

[34] Aung-Thwin 2008.

[35] Bueno de Mesquita 2005.

[36] Clodfelter 2002.

Third, killing or capturing an insurgency's leadership can hinder the insurgency's operational capabilities, especially planning and coordination. Removing an insurgency's leadership disrupts planning and operations, limits a group's expertise and know-how, and weakens its ability to coordinate attacks. When the Sri Lankan Army arrested Janatha Vimukthi Peramuna (JVP) insurgent leader Rohana Wijeweera in April 1971, for example, the guerrilla campaign, which he had masterminded and organized, foundered. Indeed, numerous attacks that Wijeweera had planned were never executed.[37] The JVP's organizational incoherence following Wijeweera's arrest left the insurgency vulnerable to government countermeasures, and the JVP was defeated shortly after Wijeweera's capture.

Fourth, when insurgencies' leaders are arrested, they occasionally accept a "plea bargain" arrangement, swearing an oath to the counterinsurgent and encouraging their followers to stop the rebellion. This can lead other insurgents to surrender, weakening the insurgency and increasing the probability of incumbent victory. Indeed, this process was critical in the defeat of Filipino insurgents during the Philippine-American War in 1902, which I discuss in greater detail below, and in the marginalization of the Kurdish Worker's Party (PKK) after the arrest of PKK leader Abdulla Ocalan in 1998.

H2: Counterinsurgents who decapitate an insurgency's leadership will be more likely to defeat the insurgency.

Is the Effectiveness of Leadership Decapitation Conditional?

Scholars in the terrorism literature have suggested that the effectiveness of leadership decapitation is conditional on the type of organization against which decapitation is used.[38] These studies assume that differences in the ideas and aims of terrorist groups intervene to change the effects of decapitation against various types of groups. For example, both Jordan and Mannes find

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[37] Arasaratnam 1972.

[38] Jordan forthcoming; and Mannes 2008.

evidence that decapitation is ineffective against religious insurgencies.[39] Jordan also finds that decapitation is effective against ideological groups but not against secessionist groups. The logic underpinning this argument is that the goals of certain kinds of groups indicates a high level of commitment, meaning that decapitation is likely to spark additional resistance by these actors but not by less committed actors with different goals or beliefs.

Especially in today's era, in which religious grievances define the high-profile insurgencies, it is tempting to reason backwards and hypothesize that religious groups are more likely to resist leadership decapitation. However, this logic is dubious for two reasons. First, secessionist, communist, and religious insurgencies are all "causes" to which those who fight for them are committed. Decades of research on insurgencies suggest that joining or supporting insurgency is fraught with risk--the costs can be high.[40] Given the risk of joining or supporting an insurgency, group members are likely highly committed regardless of whether or not the group abides by a specific ideology. As a consequence, there should not be a significant difference between groups that organize around and pursue certain national, ideological, or religious goals and groups that do not.

Second, and related, it is dubious to anticipate significant differences between secessionist, ideological, and religious insurgencies. Why should one type of aim lead to greater commitment than another? In the eyes of those pursuing them, the group's aim is legitimate and is an end worth fighting and possibly dying for. Indeed, millions of people have died for non-religious ideologies. Although religious groups define their goals as being based on belief and faith, ideological and secessionist groups are also fighting for ideas that are desirable at least partly for their normative value. Ethnic insurgencies fighting for independence, for example, can be just as committed (and attract a broader base) than religious insurgencies whose ideas and practices might only appeal to a few believers.

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[39] Jordan forthcoming; and Mannes 2008.

[40] Lichbach 1998; Wood 2003; Petersen 2001; and Weinstein 2006.

This points to a third reason why we should not expect group aims--secession, communism, or Islamism--to systematically influence the effectiveness of leadership decapitation: other factors might be more important in determining whether decapitation works, such as the counterinsurgent's material power or whether or not the insurgency has internal ideological divisions.

Finally, an emergent literature on civil war and insurgency persuasively argues that the environment of irregular war induces similar reactions by ostensibly different types of groups.[41] This school of thought rejects the assumption that particular forms of violence have differential effects against varying types of insurgencies. Rather, similar tactics should have similar effects across guerrilla campaigns because the nature of the structural environment in which they occur induces these effects. From this structural perspective, actors' motivations and level of commitment are endogenous to war. This suggests that actors' reaction to decapitation is contingent on other factors such as their perception of incumbent strength.[42]

H3: The effectiveness of leadership decapitation is not conditional on group type.

Alternative Explanations

Although the main focus of this article is on the relationship between leadership decapitation and counterinsurgency campaign outcome, six alternative explanations might also explain these outcomes. I describe leading explanations of counterinsurgency campaign outcomes in this section.

The first is civilian victimization. Scholars disagree on the effectiveness of civilian victimization. Kalyvas and Kalyvas, Kocher, and Pepinsky argue that civilian victimization is counterproductive and leads to tactical losses in counterinsurgency.[43] They suggest that the tactic

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[41] See Kalyvas 2006.

[42] Kalyvas 2006.

[43] Kalyvas 2006, chapter 6; and Kalyvas, Kocher, and Pepinsky 2009.

pushes civilians to support the rebels because of angry emotional responses or to seek protection. However, recent scholarship challenges this assertion, suggesting that civilian victimization, while grisly, can play a significant role in counterinsurgency success.[44] Specifically, civilian victimization can separate the civilian population from the insurgency and intimidate civilians to stop participating in or supporting rebellion.

The second is regime type. Democracies have long been thought to be inferior at counterinsurgency.[45] Mack suggests that democracies, which have casualty-averse publics, accountable leaders, and free media, lack the resolve to fight insurgencies effectively.[46] Alternatively, Merom argues that liberal norms constrain democracies from resorting to the ruthless brutality necessary to defeat insurgencies, reducing their effectiveness vis-a-vis non-democracies.[47] Recent research, however, disputes that democracies are less effective than non-democracies. Lyall finds that democracies are no less effective than non-democracies in counterinsurgency campaigns after controlling for selection effects.[48] Zhukov's study goes a step further, suggesting that democracies may actually be more effective than non-democracies, perhaps because they refrain from engaging in the counterproductive excesses that hinder the effectiveness of non-democracies.[49] Because of these conflicting expectations, it is unclear whether we should expect any systematic relationship between regime type and counterinsurgency campaign outcomes.

The third is cultural differences. Broad cultural differences are thought to put counterinsurgents at a disadvantage. Theorists of insurgency and counterinsurgency have suggested that insurgencies can manipulate cultural differences such as religious and linguistic differences

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[44] Downes 2007; Lyall 2009; and Johnston 2009.

[45] Mack 1975; and Merom 2003.

[46] Mack 1975.

[47] Merom 2003.

[48] Lyall forthcoming.

[49] Zhukov 2008; c.f. Abrahms 2007.

between the civilian population and the counterinsurgent as a "cause" around which to attract popular civilian support.[50] Indeed, analysts have pointed to the paucity of Arabic speakers in the U.S. military and fissures between Arab and Christian identities as key reasons underlying U.S. struggles in Iraq.[51] Yet there is an emerging literature which suggests that military factors influence civilian collaboration and military effectiveness in guerrilla wars more than cultural factors.[52] From this perspective, violence and territorial control play a greater role than identity in determining which side the civilian population supports, making cultural differences largely a result of military effectiveness rather than a cause.[53] This, coupled with the fact that stronger counterinsurgents often self-select fighting insurgencies abroad--where cultural differences tend to be largest--suggest that there might be no significant correlation between cultural differences and counterinsurgency outcomes.

Insurgent external assistance is the forth alternative explanation. Most previous studies of counterinsurgency campaign outcomes either downplay the significance of external assistance or ignore it altogether.[54] Arreguin-Toft argues that external support does not play an important explanatory role in insurgent success, focusing instead on the strategic interaction of the weak and strong.[55] Recent scholarship, however, suggests that insurgent external assistance may be more important than previously thought. Salehyan argues that insurgents with external assistance significantly lower their own costs of fighting and gain bargaining leverage vis-a-vis governments.[56]

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[50] Galula 1964; Trinquier 1964; Taber 2002; Laqueur 1977; and Polk 2007; Duffy Toft 2007.

[51] Hashim 2006.

[52] Kalyvas 2006.

[53] Kalyvas 2003, 38.

[54] Mack 1975; and Merom 2003.

[55] Arreguin-Toft 2005.

[56] Salehyan 2007. Insurgent and refugee flows can also exacerbate regional dynamics and cause new civil and interstate wars. See Salehyan and Gleditsch 2006.

Record's and Jones' studies each makes a stronger contention: that external support plays a role in explaining insurgent victories.[57]

The fifth is rough terrain. Rough terrain such as jungles, mountains, and forests makes civil war more likely to occur by increasing the opportunity for insurgent mobilization.[58] For the same reason, it may also increase insurgents' chances of defeating counterinsurgent forces. Rough terrain is theorized to have this effect because insurgents can establish stronghold areas in protected geographic zones and take sanctuary from counterinsurgency forces.[59]

The sixth is incumbent capabilities. This explanation simply suggests that the amount of power the counterinsurgent has predicts war outcomes. Although it is a simple proposition, analysts have differed about the direction of the hypothesized causal arrow. While some argue that the stronger side usually wins,[60] others suggest that pathologies within the ways that big states with powerful militaries fight insurgencies can undermine their effectiveness in counterinsurgency campaigns.[61] The most persuasive argument is that high incumbent capabilities predicts incumbent victory. Record argues that it is "always better to be stronger" because a high relative strength increases the counterinsurgent's leverage and range of options for dealing with insurgencies. Even if stronger incumbents might be more prone to ineffectively "swat flies with pile drivers," they are likely to be able to have enough strength in reserve to defeat weaker insurgencies.

Each of these theories offers a plausible explanation of counterinsurgency campaign outcomes. I do not claim that the alternative explanations are inherently flawed, nor do I dismiss the possibility that multiple causes are at work. Indeed, it is probable that there is more than one cause

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[57] Record 2008; and Jones 2008. However, Record nor Jones conduct rigorous empirical tests of the claim or account for the confounding effects of other independent variables. Lyall and Wilson III (2009) include external support in their statistical models and find that it is significant and negatively related to counterinsurgent success.

[58] Fearon and Laitin 2003.

[59] Galula 1964; Kocher 2004; Fearon and Laitin 2003; and Kalyvas 2006, 132-140.

[60] Record 2008, 131.

[61] Hammes 2006; Nagl 2005.

at work: war outcomes are the product of complex processes.[62] To preview the results, I find support support for some but not all of the alternative explanations. More importantly for assessing the effectiveness of leadership decapitation, by ensuring that any correlation between leadership decapitation and campaign outcome is not spurious or accounted for by leading alternative explanations, the inclusion of these variables raises the bar for the independent variable of interest.

In the following sections I discuss the dataset, research design, and empirical strategy used to test these hypotheses.

Data

This study investigates the effectiveness of insurgent leadership decapitation using a new database of 168 guerrilla insurgency campaigns from 1803-1999. The dataset gives significant additional leverage over existing anecdotal accounts. By including negative cases in the analysis and analyzing a systematic, unbiased sample, better inferences can be derived about the effectiveness of decapitation.

Existing public datasets were not appropriate for answering this study's research question. These datasets are organized according to whether a war was fought within a state ("civil war") or between two or more states ("interstate wars"). By organizing the unit analysis as civil, interstate, or extra-state, existing datasets pool together heterogeneous units and thus cannot yield valid causal inferences about insurgency and counterinsurgency.[63] Therefore, a new database on counterinsurgency campaigns was compiled to pool together a sample of homogenous units.

The unit-of-analysis is "counterinsurgency campaign." A counterinsurgency campaign is fought between the regular army of an incumbent government and an insurgency. An *insurgency* is

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[62] Other studies come to the same conclusion. See Lyall and Wilson III 2009, 82-83.

[63] For example, Fearon and Laitin's dataset pools together guerrilla wars, coup attempts and conventional wars; the Correlates of War datasets pool together conventional and guerrilla wars; so does the UCDP-Uppsala dataset. Even Arreguin-Toft's (2001) database, which is dedicated exclusively to "asymmetric conflict" actually contains four distinct types of conflict.

defined as a violent struggle by non-state actors to obtain their political objectives--independence, autonomy, or political power-sharing--using a guerrilla warfare strategy. A *guerrilla warfare strategy* involves three criteria: power asymmetry; the civilian population; and tactical mismatch. First, power asymmetry occurs when the government is stronger than the insurgency. This can be observed if the incumbent government used more sophisticated, lethal weapons or was numerically larger than the insurgency.[64] Second, the role of the civilian population also distinguishes counterinsurgency campaigns from other conflicts. In counterinsurgency campaigns, the insurgency attempts to win the allegiance of at least some portion of the civilian population. This helps distinguish counterinsurgency campaigns from other types military campaigns in which a government's adversary attempts to achieve their goals without popular support, including rebel groups using a "regular" or "conventional" (non-guerrilla) strategy of direct military confrontation. To operationalize this, only groups that operated within the civilian population were included.[65] Third, tactical mismatch occurs when the incumbent uses a regular (standing) military force against small, mobile insurgent units using unconventional tactics such as hit-and-run attacks and ambushes. This captures the "irregular," or "unconventional," military aspect of guerrilla warfare.[66] The final identification criteria were a minimum 1,000 battle death rule and a minimum one month duration rule. These criteria ensure that each war in the dataset was in fact a sustained, asymmetric violent conflict between organized military actors rather than a series of isolated uprisings or riots.

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[64] This is almost always the case in wars against sub-state armed groups, making identification of this attribute relatively easy.

[65] This is the best observable indicator available because while it is impossible to observe insurgent motivations directly, which means it is impossible to observe directly whether insurgents really desired civilian support, groups that voluntarily implant themselves into the civilian population are likely well aware of the importance of civilian support--civilians' rejection of an insurgency can lead to the demise of an insurgent organization. Identifying cases where non-state armed groups chose to operate within the civilian population is thus an acceptable proxy for an insurgency's attempt to gain civilian.

[66] The distinction between regular and guerrilla warfare can be difficult to observe. Some wars are characterized by varying types of warfare at different stages--insurgents might use guerrilla tactics in one phase and regular tactics in another, as did Filipino rebels during the U.S. occupation at the turn of the twentieth century, Communist insurgents during the Greek Civil War, and Viet Cong insurgents in the Vietnam War. I addressed this problem by only including cases in which the guerrilla phase lasted longer than the conventional phase.

Using these observable criteria, 168 counterinsurgency campaigns were identified using three existing datasets and several military encyclopedias.[67] All cases that failed to meet any of the operationalization rules were excluded. In addition, conflicts that were unresolved by January 2007 were excluded. Below I discuss the operationalization of the study's variables.

Research Design

The dependent variable in this study is the incumbent's success or failure in a counterinsurgency campaign. I use a simple yet important observational criterion to identify success and failure: war outcome. Two measurements of war outcome are used. The first, *Outcome (binary),* is a dummy variable coded "1" for government victory.[68] War outcome is the ultimate victory or defeat that concludes armed hostilities. For a government to prevail, it must defeat or marginalize the insurgency, making war outcome an important indicator of effectiveness. A "victory" occurs when the incumbent defeats the insurgency militarily, destroys its organization, or the campaign ends without any political concessions to the insurgency. Examples include the U.S. defeat of the Philippines (1899-1902), the Philippines defeat of the Huks (1946-1954) and Indonesia over Darul Islam (1948-1962). A "defeat" occurs when the government is defeated militarily or concedes at least some of the insurgency's demands.[69] Examples include the U.S. in the Vietnam War and the Soviet Union in Afghanistan. The second indicator, *Outcome (trichotomous),* includes an intermediate category

[67] The Correlates of War (COW) Intra-State War Dataset (Version 3.0); the COW Extra-State War Dataset (Version 3.0); and the Fearon-Laitin civil war data set (2003). Only COW includes cases from the pre-1945 era, so I also used several military encyclopedias to identify cases prior to the pre-1945 period

[68] *War Outcome* is coded from the incumbent's viewpoint, which is the viewpoint most often found in the existing secondary data sources such as Correlates of War datasets and Michael Clodfelter's *Warfare and Armed Conflicts*.

[69] To check the sensitivity of the results to a different understanding of victory and defeat--one in which a political settlement is considered a new form of cooperation between the government and the insurgency, which is a common perspective in the literature on bargaining and war--I test the results using a second measurement of the war outcome variable, a trichotomous ordinal measure with the possible outcomes of "win," "draw," or "loss." For this variable I recoded the "losses" so it only included only cases in which the government was defeated militarily or conceded all, or nearly all, insurgent demands, including the granting of independence, territorial withdrawal, or deposition of sitting leaders. I then coded a "draw" category that included cases in which the counterinsurgent ceded some, but not all, of the insurgency's demands.

for campaigns that end in draws. Cases in which the incumbent concedes some but not all of an insurgency's demands are coded as "draws." Examples include the peace agreement between the government and Mozambique-RENAMO (1979-1992) that led to a new constitution and a multiparty political system and the peace accord between the Sudanese government and the Sudan People's Liberation Army (1983-2005), which granted autonomy and other political privileges to the southern Sudanese people.

Table 1 displays summary statistics of all the variables used in this study. The independent variable of interest, *Decapitation*, is a dummy variable coded "1" if the insurgency's top leader or leaders were killed or captured during the course of a conflict. Leadership structures vary across insurgencies, so operationalizing leadership decapitation requires attention to this nuance. In cases where an insurgency had a single top leader, such as Abimeal Guzman of the Peruvian Shining Path and Kartosuwiryo of the Indonesian Darul Islam, observations were coded as "1" if that leader was killed or captured. However, in cases where more than one individual led an insurgency, such as the Mau Mau and the Viet Cong, cases were coded as "1" if at least half of the insurgency's core leadership was captured or killed.

This operationalization is used for theoretical, empirical, and methodological reasons. If my theory is correct, we might expect that the killing of most, but not all, of an insurgency's leadership would have a negative effects on a group's operational effectiveness or remove key figures to whom a large segment of a group were loyal. Methodologically, however, by not requiring the capture or killing of all of a group's core leadership, I am creating a hard test for my theory; if I only counted cases in which the full leadership of a group was captured or killed, which would be more likely to lead to the total collapse of a group, I would only be investigating the effectiveness of decapitation in the easiest set of circumstances for my argument. By using a less restrictive operational definition of decapitation, I am biasing the codings against my theoretical expectations.

Cases were also coded "1" if an insurgency's leader was killed or removed by other members within the organizations. This has occurred in a handful of cases, such as the Khmer Rouge insurgency in Cambodia, in which Son Sen was removed from power in May 1992 following a dispute about whether to participate in peace negotiations. These cases were included for two reasons. First, the purpose of this study is to assess the impact of the removal or elimination of an insurgency's core leadership, regardless of who removes the leaders. These cases qualify. Second, including these cases helps mitigate possible non-randomness in the application of leadership decapitation by counterinsurgents. Although counterinsurgents rarely have the luxury of strategically choosing whether or not to capture or kill an insurgency's leadership, including these cases further assuages any concern about selection effects.

Careful attention was paid to sequence. In some campaigns, counterinsurgents arrest or kill insurgent leaders after defeating the insurgent group, not before. These cases were not coded as cases of decapitation. In this situation leadership decapitation is a result of military effectiveness, not a cause, so it would be incorrect to code it as a potential explanatory factor of effectiveness. By only coding the variable "1" when the capture or killing of insurgencies' leadership preceded the war's outcome, we create a meaningful test of the hypothesis that decapitation has counterproductive effects. Appendix 1 displays codings of each case in the dataset.

Finally, to test whether the mode of leadership decapitation (capture vs. kill) matters, two dummy variables, *Captured* and *Killed*, were included. *Captured* is coded "1" if the insurgency's leader or leaders were arrested or forced into exile. *Killed* is coded "1" if the insurgency's leader or leaders were killed in a targeted assassination or in battle.

Turning to alternative explanations, other variables are included to proxy for their effects. The first is *Civilian Targeting*. It is a dummy variable coded "1" for campaigns in which the incumbent government's military forces either intentionally selected civilians as a direct object of attack or if the civilian population was the victim of military attacks that failed to discriminate between

combatants and non-combatants.[70] Civilian targeting can take any of several forms: population concentration or relocation; massacres; indiscriminate or deliberate shelling or bombardment of civilian areas (aerial, naval, or land), starvation blockades, or sieges of population centers. *Civilian Targeting* was only coded "1" when the incumbent repeatedly engaged in such such victimization, not in isolated acts of indiscriminate violence or incidents that were not part of a larger strategy.[71] It was coded based on information contained in Michael Clodfelter's *Warfare and Armed Conflicts*, a reference book with historical accounts of wars since 1500, and a wide variety of case specific secondary sources.[72]

Regime Type is the second. To code *Regime Type*, the Polity IV dataset was used. Polity uses an index to measure a country's democratic and autocratic features based on the competitiveness of political participation, openness, and competitiveness of executive appointment, and constraints on the power of the executive. The Polity IV dataset focuses on governmental institutions rather than civil or economic rights and freedoms. It is an excellent indicator of the main source of democracies' supposed ineffectiveness, the political constraints imposed by competitive democratic institutions. Two variables are used to operationalize the government's regime type. The first, *Regime Type,* is a dummy coded "1" if, during the duration of the war, the government's median score on the "polity2" variable in the Polity IV dataset was 7 or above. Following convention in the quantitative

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[70] This conservative coding procedure is consistent with data collection efforts made in other leading studies of civilian victimization (Downes 2004; 2008; Stanton 2007), as it is useful for identifying who targets civilians and what the causes and consequences of this are. This is justified, as this research asks original first-order questions on an important topic and collects to evidence to bear on this question. Moreover, for Hypotheses 1 and 2, the presence of absence of persistent civilian targeting is actually the proper indicator to capture the concept I am exploring.

[71] Both intentional killing of civilians and indiscriminate collateral damage are included in my definition. Even if civilian casualties are accidental, analysts suggest that attacks on populated areas designed to weaken insurgencies have observationally equivalent counterproductive effects. Indeed, existing micro-level studies conflate intentional harm and unintentional collateral damage to test this argument. This is consistent with existing micro-level empirical studies, which focus not only on intentional killing (homicide) but rather explore the treatment effects of indiscriminate campaigns that inflict large amounts of collateral damage (c.f. Lyall 2009; Kalyvas, Kocher, and Pepinsky 2008). The operationalization is also consistent with existing cross-national studies of the causes of civilian targeting (see Downes 2008; Stanton 2007).

[72] Clodfelter 2002.

literature, this indicates that the government was a democracy.[73] The second, *Polity2,* is a country's "level" of democracy. This measure is a raw "Polity Score" that is derived using Polity's indices for democracy and autocracy. These indices range from zero (least democratic) to 10 (most democratic). The latter are subtracted from the former to create a 21-point scale ranging from -10 to 10 measuring a state's overall "level" of democracy.

The next two independent variables operationalize cultural differences.[74] Two indicators are used. The first is *Religious Differences*. Drawing on secondary sources, a dummy variable was coded that indicates whether the counterinsurgent practiced a different religion from the majority of the civilian population associated with the insurgency. The second is *Linguistic Differences*. It is a dummy variable that was coded "1" if the counterinsurgent spoke a different language from the majority of the civilian population associated with the insurgency. If the insurgent's civilian population spoke a colonial lingua franca, such as English in British colonies or French in French African colonies, I coded the case as a linguistic difference if the colonial lingua franca was not the main local language used by civilians in the conflict theater.[75]

The next independent variable is insurgent external assistance. *Insurgent External Assistance* is a dummy variable coded "1" if an insurgency received military or economic aid or sanctuary from an external actor. Military and economic assistance includes direct military intervention on the insurgent's behalf, arms with which to fight, or money to put toward the war effort.[76] Sanctuary involves a physical safe haven or rear base where insurgencies can regroup, plan operations, and

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[74] Looking at cultural differences rather than cultural diversity indicators--for example, the number of different ethnic groups or languages spoken in a conflict area--is appropriate because diversity indicators fail to account for the most important dimension of culture that is thought to have an effect on war outcomes--differences between the counterinsurgency and the local population.

[75] Language and religion, of course, are not the only indicators of cultural differences. One could use a variety of indicators of ethnic, racial, or other differences. However, religious and linguistic differences have recently been identified as two of the most important cleavages in counterinsurgency campaigns. Thus, the indicators used here provide an important first-cut at these hypotheses.

[76] Byman et al 2001; and Staniland 2005.

evade incumbent attack. The variable was coded using Clodfelter's *Warfare and Armed Conflicts*, as well as a wide variety of case specific secondary and reference sources.[77]

Dummy variables were also created for the type of terrain in which each counterinsurgency campaign was fought. A dummy called *Rough Terrain* was created to capture the nature of the physical terrain in which the conflict was fought. *Rough Terrain* includes campaigns fought in mountains, jungles, or forests. These variables were coded using descriptive accounts of the conflict theater where the bulk of the fighting took place.

Finally, a variable is included for *Incumbent Material Capabilities*. I used Correlates of War Project's aggregate indicator of material capabilities in the year the war started. This variable is an index of indicators of national power and material capabilities, including each country's share of global military power (army size and military spending) and economic power (iron production, energy consumption, and population power).

I also include a battery of control variables. I begin with a variable called *Incumbent Military Expenditures*, which measures the amount spent by the incumbent on its military in the year the war started. Lyall and Wilson III have found military expenditures to be a significant negative predictor of campaign outcomes.[78] I use data from the Correlates of War Project.

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[77] It is difficult to measure levels of insurgent external assistance precisely because foreign patrons often dispense assistance clandestinely. For the same reason, identifying which types of assistance (sanctuary, military, economic) were given is also difficult. These challenges prevent researchers from creating a precise measure of different types and amounts of assistance. Yet researchers can be confident that any instance of foreign assistance to insurgencies is significant, because supporting an insurgency is akin to sending a costly signal of aggression to the supporter's adversary (see Fearon 1994a; 1994b; and 1997; on signaling and interstate wars, see Thyne 2006). Supporting an insurgency in another country could have significant implications for the external supporter, possibly triggering escalation to an international crisis (see Gleditsch, Salehyan, and Schultz 2008). Because the stakes are high, it stands to reason that when insurgencies have a foreign backer, they are receiving a significant amount of aid such that the foreign backer can ensure itself an acceptable probability of achieving its desired goals and avoiding the consequences of failure. It is thus sufficient to use a less precise measurement that ensures a more accurate coding--in this case, a dummy variable for the presence or absence of external assistance, which varies greatly across insurgencies. Only 28.6% of insurgencies (48 of 168) in the dataset received external assistance.

[78] Lyall and Wilson III 2009.

I also control for the *Distance* of the incumbent from the conflict theater using the number of kilometers (logged) between the incumbent's capital city to the conflict theater. I calculated these distances using Google Earth's "Ruler" function.

Some analysts have suggested that the post-World War II era has been a "golden age of insurgency" with unique dynamics, including increased insurgent access to external support.[79] Globalization, democratization, and other liberal and anti-liberal reforms have combined to change the nature, dynamics, and outcomes of counterinsurgency wars. To control for these effects, a dummy variable was created called *Post-1945*.

I also control for war duration. A variable called *Duration* was created that captures the number of years a conflict lasted from the onset to the conclusion of armed hostilities. *Duration* was coded from the Correlates of War Project's datasets and historical encyclopedias. Scholars have linked duration to an increased probability of government defeat, mostly because incumbents eventually to give up in long, costly campaigns that insurgents are resolved to continue.[80]

Similarly, it is important to control for time. Scholars have suggested that the probability of incumbent victory has diminished over time (Lyall and Wilson III 2009). To control for these temporal shifts, I created a continuous yearly counter variable, *Time*.

One robust finding in the civil wars literature is that poorer countries are more likely to experience civil war. It is also possible that poorer governments are more likely to be defeated by insurgencies. To control for this possibility, I use a variable called *GDP* that takes the counterinsurgent government's logged GDP in millions in the first year of the conflict. Data were compiled from Zhukov's dataset.

Dummy variables were created for insurgencies' aims: the dummies are *Secessionist, Communist,* and *Islamist,* and *Foreign*. *Secessionist* was coded "1" if the insurgency sought to withdraw from the

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[79] Westad 2007.

[80] Mack 1975; and Merom 2003.

political community of which it was formally a part and form an independent political entity. Both groups seeking national independence as a sovereign state, such as the Kosovo Liberation Army, and groups seeking regional autonomy within an existing state, such as the Chittagong Hill Tracts insurgency, were included so long as their goal was no longer to be under an existing jurisdiction. *Communist* was coded as "1" if the insurgency sought to supplant or otherwise fundamentally change the nature of the existing political system goals and implement a Marxist or Communist political system or social organization. *Islamist* was coded "1" when the insurgency sought to supplant or otherwise fundamentally change the nature of the existing political system and implement an Islamic political system or social organization. Moderate Islamic insurgencies that did not seek to transform politics and society to one in keeping with Islamism, such as the Palestinians during the Arab Revolt (1936-39) were coded "0," as were all non-Islamic insurgencies. *Foreign* was coded as "1" if the campaign was a military operation intended to accomplish a specific objective in a foreign country or colonial territory. These variables were coded using Zhukov's data on counterinsurgency and Clodfelter's *Warfare and Armed Conflicts* and reference sources.

Methodology

Because my dependent variable is coded using dichotomous and trichotomous measurements, traditional ordinary least squares (OLS) regression--which assumes a continuous and unlimited dependent variable rather than a binary and limited one--yields biased estimates. To minimize bias, I use logistic regression and ordered logistic regression analysis. Because the observations of the error term are not drawn from identical distributions and have a non-constant variance, I use robust standard errors with observations clustered by country.

One potential methodological objection is that decapitation is not randomly applied to cases, so a selection effect will bias statistical estimates. This is incorrect. Although counterinsurgents often publicize leadership decapitation as being the result of their own deft military tactics and strategy,

leadership decapitation is assigned more randomly than one might think. The reason why is because leadership decapitation typically occurs as the result of an *opportunity* to capture or kill an insurgency's leadership rather than as a strategic *choice*. Almost all counterinsurgents prefer to capture or kill an insurgency's leadership, but rarely can they select the "ideal" strategic conditions in which to do so--they take the opportunity if it arises. The assignment of decapitation opportunities is unpredictable in the fog of war. When a leader is killed by incumbent artillery, for example, it is just as probable that he would not be killed in that battle relative to other insurgents in the battle--he was a victim of bad luck or poor planning. In other situations, decapitation occurs when leaders are betrayed by followers with personal motives. These decapitations also have nothing to with a selection effect--they are the product of personal vendettas or greed. Because leadership decapitation is rarely the product of strategic choice, it is more important to control for other factors such as incumbent material capabilities that could systemically influence the incumbent's opportunity to decapitate insurgent leaders *and* make the counterinsurgent more likely to win than to use a selection model, which would be inappropriate.[81]

Statistical Analysis and Results

Table 2 shows the results of seven logistic regressions using incumbent victory or defeat as the dependent variable.[82] Model 1 includes decapitation and proxies for leading explanations of counterinsurgency war outcomes including regime type, cultural differences between

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[81] Furthermore, an important part of the argument being tested is whether leadership decapitation--no matter how it occurs--is counterproductive and makes counterinsurgents more likely to lose by making a martyr of an insurgency's leadership. This is a popular yet untested assumption. To investigate this prediction, it does not matter how decapitation is applied--it matters how insurgents react to it. This null hypothesis can and should be tested using observational data and standard logistic and ordered logistic regression models.

[82] Some analysts also include an intermediate "draw" category between "victory" and "defeat." Draws would include partial concession of insurgent demands. However, there is only a small number of cases (8) in the dataset that would be coded as a Draw. Thus, for Models 1-8 I use the binary won/loss variable, However, to make sure this coding decision does not influence the results, I re-ran the models using the trichotomous dependent variable in ordinal logistic regression models. The results were unchanged.

counterinsurgents and insurgents, and rough terrain. Models 2-7 control for other variables that could potentially influence the relationship found in Model 1. To save space, I will not discuss the alternative explanations in depth here, but most of the results confirm the findings of previous studies.

Turning to the independent variable of interest, the models displayed in Table 1 indicate that leadership decapitation has a significant positive effect on incumbents' chances of defeating insurgencies ($p<.01$). Model 1 provides support for my hypothesis (H2): decapitation increases the probability of government victory. The results cast doubt on Hypothesis 1, that decapitation is ineffective or counterproductive. Models 2-7 provide additional support for H2, demonstrating that the independent positive effect of decapitation is robust to a battery of other factors that could influence campaign outcomes. This increases confidence that the result is not spurious.

Table 3 contains the results from seven ordinal logistic regression models. Using a trichotomous dependent variable that involves wins, draws, and losses, I replicated the logit models in Table 2. Across the specifications, decapitation remains significant ($p<.01$) and positive. This suggests that decapitation is correlated with counterinsurgency success regardless of one's definition of war outcome.

To help interpret the substantive effect of decapitation, I computed predicted probabilities of incumbent victory by setting a hypothetical baseline probability of victory and then varying leadership decapitation and other key explanatory variables.[83] These results are reported in Table 5. The baseline is a counterinsurgency campaign fought in open or urban terrain without leadership decapitation, civilian victimization, or insurgent external assistance for the insurgency. The predicted

[83] The predicted probabilities are based on estimates from the full model (Model 7).

probability of government victory in such a campaign is approximately 39.9 percent.[84] From this baseline, I computed the effect that leadership decapitation has on the probability of government victory. The results show that decapitation has a strong substantive effect on counterinsurgency success: decapitation raises the predicted probability of government victory to 86 percent, a change of over 46%.[85]

The results also provide no support for the argument the effectiveness of leadership decapitation is conditional on group type. This is consistent with Hypothesis 3. Table 4 presents results of logit models that include secessionist, communist, and Islamist insurgency as predictors of counterinsurgency outcomes. Model 15 simply includes these groups as predictors of war outcome to assess whether counterinsurgents are more or less likely to win against any particular type.[86] Models 16, 17, and 18 use interaction terms to test conditional hypotheses on group type.[87] The models show that the conditional effect of leadership decapitation is slightly larger in these models than in Model 15, meaning that leadership decapitation increases incumbents' chances of victory more when it is used in campaigns not involving communist, secessionist, or anti-foreign groups. However, while the interaction terms in models 16, 17, and 18 have negative coefficients, this is

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[84] It should be noted that the actual baseline rate of government victory in counterinsurgency campaigns is higher. For example, the observed probability of government victory in the dataset is 71.6%. However, by withholding key independent variables to establish a baseline victory predicted probability-- which lowers the baseline predicted probability--the individual effect of key independent variables can be assessed in a "controlled" environment. The predicted probabilities are more useful as an indicator of the relative importance of various independent variables than as an absolute measure of the probability of government victory under particular conditions.

[85] Holding all other independent variables at their mean, which means including the key significant predictors in the baseline predicted probability equation, the substantive effect of decapitation remains strong, increasing the predicted probability of government victory by 11.4 percent. This predicted increase in the chances of government victory is lower in this second analysis because it also captures the mean effect of civilian victimization, which the baseline model does not. In practice however, in many cases leadership decapitation and civilian victimization coincide with each other, as leaders are often killed in aerial bombing campaigns that also inflict collateral damage, and so these effects compound one another.

[86] Contrary to expectation, one type of insurgency, communist insurgency, is a significant negative predictor of war outcome, meaning that governments are significantly less likely to defeat communist insurgencies than other types of guerrilla groups.

[87] Brambor, Clark, and Golder 2006.

simply because these groups are more difficult to defeat in general.[88] Indeed, decapitation *increases* the incumbent's chances of winning against these groups relative to their chances of victory against these groups in which insurgent leaders are *not* captured or killed. In sum, this evidence supports Hypothesis 3, that decapitation's effectiveness is not conditional on group type.[89]

Finally, I tested whether the mode of leadership decapitation influences the effectiveness of the tactic. Scholars in the terrorism literature have suggested that capturing a terrorist group's leader is more effective than killing him because it reduces the chances that the leader will be viewed as a martyr around which to organize vigorous resistance. I find no evidence that this is true in the context of guerrilla campaigns. As Model 19 in Table 4 shows, however, both forms of leadership decapitation--*Capture* and *Kill*--are significant, positive predictors of counterinsurgency victory. Both types of decapitation make counterinsurgents more likely to win.

Case Study Analysis

In this section I examine two historical cases of leadership decapitation, the Tyrol insurgency (1809-1810) and the Philippine-American War (1899-1902). The case study analysis is part of a "nested" approach that offers several advantages.[90] Not only are the individual strengths of both statistical and case study approaches combined, but the two approaches complement each other in useful ways. As Lieberman observes, statistical analyses can guide case selection, provide direction for focused case studies analysis, and serve as an additional test of hypotheses. Small-N analyses, in turn, help assess the plausibility of statistical relationships and can suggest superior measurement

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[88] Statistical significance of interaction terms is not interpreted in the same way as non-additive terms. See Braumoeller 2004; and Brambor, Clark, and Golder 2006.

[89] The interaction of decapitation and Islamist insurgency could not be tested because in the small number of cases--four--in which the counterinsurgent decapitated an Islamist group's leadership, the incumbent went on to defeat the Islamist group. Thus, while there is no statistical relationship because the interaction variable perfectly predicted success in the small sample of cases, there's limited evidence that decapitating Islamist insurgencies at least does not have an overwhelming negative effect.

[90] Lieberman 2005.

strategies for quantitative research. Overall, a nested approach improves the chances of making valid causal inferences by drawing on the distinct and synergistic strengths of the two approaches.[91]

Having already demonstrated that a causal relationship exists between leadership decapitation and counterinsurgency success, the Tyrol and Philippines cases were selected primarily to test the plausibility of the theoretical mechanisms suggested earlier in the paper. Although the Tyrol and Philippines insurgencies are not contemporary cases, they are ideal for this purpose. Both insurgencies behaved and were organized similarly to the classic guerrilla movements of the Cold War era and the contemporary era. Both fought against foreign occupation much like the the contemporary campaigns in Iraq and Afghanistan. These commonalities ensure that the unit of analysis is homogenous and that the cases are comparable. Advantageously, however, Tyrol and the Philippines are "out-of-sample" cases that are rarely invoked in hypothesis-generating case studies. Analyzing such cases rather than the usual cases--Vietnam, Malaya, or Northern Ireland--allows me to examine the external plausibility of hypotheses generated by previous literature.

Since counterinsurgents won in each case, we need to have "most-different" cases that vary along many dimensions but are similar on the independent variable of interest, allowing the researcher to isolate key similarities that help explain the common outcome. The selected cases meet this criterion, varying along several important dimensions. For example, the U.S. was a democracy at the time it fought its campaign in the Philippines but France was not when it fought in Tyrol. In the Philippines, religious differences between the U.S. and the native population were not significant, whereas in Tyrol religious differences were critical in insurgent mobilization. This kind of variation on alternative independent variables helps avoid analyzing cases that are too overdetermined to yield insight into the causal force of decapitation. The method does not allow the researcher to make precise causal inferences about the effect of x on y or generalize to the population of cases, but it

[91] Lieberman 2005, 435.

increases our confidence that the common independent variable of interest is exerting a similar causal effect across different cases, raising our confidence in the hypothesized mechanisms.

Decapitation in the Tyrolean Insurgency, 1809-1810

One of the first guerrilla insurgencies in the nineteenth century, the assassination of Tyrolean guerrilla leader Andreas Hofer illustrates one mechanism by which leadership decapitation can be effective: the removal of a militant elite to empower a moderate or compliant insurgent core. Nestled deep in the mountainous terrain of the Alps, the Tyroleans preferred to be under Austrian rule and rose in opposition to French and Bavarian rule during the Napoleonic period when Napoleon tried to annex Tyrol during the War of the Fifth Coalition in 1809.

The leader of the Tyrolean movement was Andreas Hofer, a Tyrolean innkeeper who fought against France in the War of the Third Coalition and formed an anti-Bavarian militia after France transferred Tyrol to Bavaria. Upon his return from the war, Hofer began organizing local resistance to French and Bavarians rule in Tyrol. Hofer mobilized the population almost singlehandedly, holding regular meetings in the inns and pubs to gain commitment to the anti-foreign cause.[92] The Tyrolean insurgents began their campaign in April 1809. Numbering around 20,000, they enjoyed significant early success, killing a party of Bavarian engineers who were attempting to destroy bridges that the Austrian army--the Tyroleans' ally--were planning to use.[93] The insurgents then attacked Bavarian garrisons and ambushed a column of French infantry, stealing their guns to dispense among insurgents. Hofer's forces won numerous early engagements, defeating counterinsurgent forces in Sterzing, Innsbruck, Bozen, and Trent and capturing the entirety of the

[92] Eyck 1986.

[93] Asprey 1975, 136.

Franco-Bavarian forces in these key areas, taking their guns, horses, and materiel.[94] New members flooded the group as it demonstrated the capacity to resist French and Bavarian forces.

When Austrian regular forces fighting Napoleon's army were defeated, however, the Tyroleans' effectiveness temporarily waned. The Franco-Bavarian forces could concentrate their military effort on the insurgency and escalate pressure on the rebels to concede. Foreshadowing Maoist tactics, however, Hofer's forces refused to fight for territory, withdrawing whenever they encountered French forces. The mobility of Hofer's guerrilla units allowed them to evade French firepower even though it meant losing the key territory they had won earlier. Hofer's guerrillas also mitigated French superiority by using geography to their advantage. They retreated deep into the Alps, where they established stronghold positions on the high ground and could conduct attacks on vulnerable French regulars. From this position, the partisans took the initiative and won a number of key engagements, including a victory at Berg in August that drove the Bavarians out of the country.[95]

The Tyrolean insurgency had achieved its goal: Tyrol was back under Austrian rule. Hofer received a letter from Emperor Francis, whose Austrian forces were still fighting a concurrent war against the French, in which Francis promised not to give up Tyrol in any peace agreement with the French.[96] However, the Tyroleans again had their fate decided for them when the Austrians were defeated by the French Army in the Battle of Wagram in July 1809. In the subsequent Armistice of Znaim, the Austrians lacked the bargaining leverage to keep Tyrol, and Napoleon demanded it back as part of the settlement. Austria ceded Tyrol in the Armistice, and Napoleon sent 40,000 French and Bavarian troops to occupy Tyrol.

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[94] Asprey 1975, 136.

[95] Beckett 1999, 241.

[96] Martin n.d., 3

Hofer, who had returned to his home village after defeating the Bavarians, immediately reorganized the resistance, using religious appeals to mobilize Tyrolean irregulars against the stronger occupation forces.[97] The Tyroleans still benefited from their geographic position on the high ground, and they again won numerous initial engagements after the return of French and Bavarian forces. They retook Innsbruck in August 1809 and won a series of other victories. The constant back-and-forth of the war left a political power vacuum in Tyrol that Hofer himself filled, expanding his own role from military to political leader.

Yet Hofer's control was only temporary. The French and Bavarians returned in October, again forcing Hofer and his forces to flee to the mountains. Hofer's guerrillas and the occupation forces entered into a ceasefire, but the ceasefire was largely tactical; Hofer's guerrilla forces never fully demobilized or disarmed. Low-level guerrilla activity continued, and it appeared that Hofer would never give up the struggle. However, in late 1809 Hofer's neighbor betrayed him to the occupation forces, and Hofer was captured and executed in early 1810. Why was Hofer betrayed? Hofer's militant form of nationalism was no longer widely shared by Tyroleans, who were weary of war and were ready to end hostilities. Franz Raffl, the man who betrayed Hofer, claimed that Hofer's removal was "politically necessary to ensure peace all around."[98]

Although low-level resistance continued for a few months after Hofer's capture, the decapitation spelled the end of broad Tyrol resistance. Did decapitation cause the collapse of the insurgency? Although French and Bavarian forces were in a position of strength when they captured Hofer, there is insufficient historical evidence to claim that Napoleon would have eventually conquered Tyrol had Hofer not been captured. Napoleon's army was concurrently foundering against Spanish guerrillas in the Penisular War and was again struggling in Tyrol, unable to land the decisive blow that French decision-makers had expected to be quick and easy. The two-front war

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[97] Martin n.d., 3.

[98] Eyck 1986, 190.

reduced Napoleon's ability to crush radical elements of the insurgency, namely Hofer. The historical evidence suggests that if Hofer had not been captured, he likely would have re-organized anti-occupation resistance and might have driven the French and Bavarians out of Tyrol. Hofer had already done so--twice--under similar conditions, and he was in the process of re-organizing bands of irregulars for renewed fighting. Hofer was zealously committed to the anti-foreign struggle, and it appears that he would have continued the insurgency even if public sentiment among Tyroleans was against it.[99] Like seemingly never-ending guerrilla wars in Burma and Thailand, Hofer's bands might have retreated to favorable terrain and continued prosecuting a low-level insurgency into the distant future, possibly attriting the French. However, after Hofer was executed, his subordinate commanders, who were less radical than he, were unwilling to continue the campaign in the face of its local unpopularity, and the rebellion ended shortly after Hofer's death. By removing the most radical element of the insurgency, the French were able to pacify the Tyrol.

Decapitation in the Philippine-U.S. War, 1899-1902

Filipino resistance to American annexation began almost immediately after the withdrawal of Spain following the Spanish-American War. Filipino insurgent leader Emilio Aguinaldo had been an important figure in the Filipino insurgency against Spain, but Aguinaldo had eventually accepted exile in Hong Kong as part of peace negotiations with the Spanish. While in Hong Kong, the United States, seeking to weaken Spain during the Spanish-American War, courted Aguinaldo to return to the Philippines to revitalize the anti-Spanish insurgency. Aguinaldo maintained that the U.S. promised him it would recognize Filipino independence under U.S. protection if his guerrillas helped drive Spain from the Philippines, but the two parties never signed a formal agreement.[100] Within months of Aguinaldo's return, his insurgents controlled all key areas outside of Manila and

[99] Eyck 1986.

[100] Aguinaldo 1899.

surrounded the capital. Aguinaldo declared the independence of the Philippine Islands from colonial rule on June 12, 1898. However, neither Spain nor the U.S. recognized the declaration despite the fact that the guerrillas had defeated Spain in the ground war and delivered on their promise to help against the Spanish. Meanwhile, Spain and the U.S. negotiated a surrender agreement to end the Spanish-American War, the Treaty of Paris. One of the treaty's provisions was that Spain would cede the Philippines to the United States for 20 million dollars. The agreement made no provision for Filipino independence. The American position was that the Filipinos were not ready for independence. Since there was no binding agreement forcing the U.S. to relinquish control over the islands, the U.S. annexed the islands.

Insurgent resistance followed. The anti-U.S. war began in February 1899, less than three months after the Treaty of Paris. A brief conventional war was fought; the Filipinos were beaten badly.[101] The Filipinos retreated to the hills, where in 1900 Aguinaldo organized a guerrilla war against his former allies. The guerrilla strategy was ideal: the Filipinos had superior knowledge of the local terrain and used it to mitigate the imbalance of power. The insurgents killed 500 American soldiers in the campaign's initial stages en route to numerous victorious engagements.

For a time it appeared that the Filipinos' guerrilla strategy might force American withdrawal help them achieve their political aspirations. Aguinaldo's guerrilla organization grew to an estimated 100,000 forces,[102] and the insurgents maintained control over the countryside while the U.S. occupied the towns and cities. Rather than withdrawing, though, the Americans escalated the war. The U.S. increased troop deployments, peaking at 74,000 in 1901.[103] At any given time, however, the

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[101] It is puzzling why the Filipinos would use a conventional strategy against the superior American Army. One possible reason is that the Filipinos had used a conventional strategy effectively in the final stages of the war against Spain, when American naval support had assisted their direct attacks on the Spanish occupation. With no significant external support, however, the Filipino conventional forces were no match for American firepower (Silbey 2007, 116-18)

[102] Deady 2005, 55.

[103] Deady 2005, 55.

U.S. typically only had 24,000-44,000 troops in the Philippines, a far lower number than the U.S. has deployed in several less successful campaigns.[104]

The U.S. adopted harsh tactics to counter the insurgency, punishing suspected insurgents and isolating the insurgency from the population by moving civilians to protected garrisons.[105] While these tactics inflicted significant collateral damage, they resulted in significant U.S. military gains. In 1899 Aguinaldo was almost captured and was forced to go on the run. Subsequent communications among Aguinaldo and the various insurgent detachments were poor and the cohesiveness of the insurgency was waned.[106]

Even though the U.S. made some important steps toward pacification during this period, the resistance was not broken. The insurgents simply retreated deeper into the mountainous jungles, using the physical terrain to remain out of the reach of American regulars. The Americans and Filipinos were locked in a stalemate.

In March 1901, however, the campaign took a significant turn: Aguinaldo was captured. The capture resulted from a lucky intercept of Aguinaldo's dispatches that contained information regarding his location. After a week in American custody, Aguinaldo publicly called for the cessation of hostilities, asking his followers to lay down their arms and accept the authority of the United States.[107] This marked a decisive moment in the war: although decapitation did not lead to the immediate collapse of Filipino resistance--small-scale resistance continued in Batangas and Samar after Aguinaldo's capture[108]--it directly contributed to U.S. success in three important ways.

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[104] May 1983, 356.

[105] Gates 1984.

[106] Deady 2005.

[107] Brands 1992, 59-60.

[108] Miller 1982, 171-72; Linn 2000, 215.

First, it deprived the Filipino movement of its most senior and charismatic military commander. This proved important along two dimensions: the civilian population and the Filipino insurgency. For the population, Aguinaldo was the embodiment of the struggle. Many stopped supporting the resistance after their leader endorsed American authority. For the insurgency, Aguinaldo's removal meant that leadership was delegated to Aguinaldo's subordinates, whose uncoordinated attacks and decentralized organization was less threatening and easier to counter.

Second, Aguinaldo's capture and oath of loyalty to the U.S. peeled away his base of support, a large segment of the Filipino resistance. Many insurgents broke rank after Aguinaldo was captured--in the subsequent two months, 12,000 guerrillas surrendered, and most turned in their guns. These defections disrupted the Filipino insurgency's cohesiveness and reduced its morale.[109] The groups became more localized and failed to coordinate against the Americans.

Third, the Americans were better able to to effectively target remaining dissidents after Aguinaldo's capture, in part because some of those who surrendered provided actionable intelligence.[110] High-quality intelligence facilitated successful American "mopping up" operations in Batangas and Samar, where U.S. forces cleared insurgents from key areas and isolated them for attack.[111]

Although numerous factors contributed to American success in the Philippines--including population relocation, indigenous scouts, and material superiority--the weakening of the insurgency Aguinaldo's capture sealed victory for the Americans and the war was over by July. Although Aguinaldo's capture did not lead to the immediate collapse of the Filipino insurgency, it rippled through the resistance movement, pulling the group apart and sowing the seeds of its decline.

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[109] Deady 2005, 59.

[110] Linn 2000, 294-98.

[111] Agoncillo 1990.

Conclusion

As the first systematic investigation of the effectiveness of leadership decapitation of guerrilla insurgencies, this study provides new insight into a fundamental question of counterinsurgency: does leadership decapitation work? The evidence suggests that leadership decapitation does work, at least in providing a marginal advantage to counterinsurgents.

From a policy perspective, the implication is that the benefits of leadership decapitation may be worth the costs and risks, at least to an extent. Leaders are indeed crucial to the effectiveness of insurgent organizations. Their removal weakens and disrupts insurgent movements. More broadly, the results of this study suggest that "enemy-centric" or "capture-and-kill" strategies might be more effective than the conventional wisdom admits.[112] Although scholars and practitioners have shown the merit of "population-centric" counterinsurgency strategies that focus on protecting the civilian populations,[113] certain kinds of "enemy-centric" tactics such as leadership decapitation may be effective alone or when used in tandem with population-centric principles. As illustrated by the United States' current campaign in Afghanistan, the dichotomy between enemy-centric and population-centric counterinsurgency is false. The key to defeating insurgencies is balancing the two approaches and applying them in the proper contexts.

From an academic perspective, this study has implications for two emerging literatures. The first highlights the importance of leaders, both for war and other measures of political and economic stability.[114] For example, Iqbal and Zorn find that the assassination of national leaders is correlated with many negative outcomes, including coups, revolutions, and civil wars.[115] Likewise,

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[112] This is especially poignant when considering the positive and significant effect of civilian targeting in the models. This suggests that a broader "enemy-centric" strategy that combines different types of military tactics to pressure insurgencies might actually be quite effective.

[113] Nagl 2005; and Kilcullen 2009.

[114] See Goemans 2004; Goemans and Chiozza 2004; and Miller and Toritsyn 2005.

[115] Iqbal and Zorn 2008.

Jones and Olken find that assassinations of national leaders produce substantial changes in the country's political institutions, particular in non-democracies.[116] Just as the assassination of national leaders can foster institutional breakdown and hinder the effectiveness of governments along multiple dimensions, the present study shows that the decapitation of guerrilla insurgencies can also disrupt the functioning of insurgent organizations and weaken their ability to challenge incumbent governments. The second literature investigates the correlates of success and failure in counterinsurgency.[117] Previous research in this literature focuses primarily on regime type and army "mechanization" as key explanatory variables.[118] The present study, however, suggests that variation in the use of particular military tactics also has explanatory value and should be included in future studies.

Leadership decapitation of guerrilla insurgencies works. This finding is important. While decapitation is far from a silver bullet, killing or capturing guerrilla leaders has a significant positive effect on counterinsurgents' chances of winning. While it is rare for any tactic to singlehandedly win wars, identifying particular tactics that make success more or less likely is an important assessment tool. Incumbent governments should not design their entire counterinsurgency strategies around leadership decapitation, but decapitation should remain on the table as one instrument among others that can help defeat insurgencies.

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[116] Jones and Olken 2007.

[117] Lyall and Wilson III 2009; Lyall forthcoming; and Zhukov 2008.

[118] On regime type, see Lyall forthcoming; and Zhukov 2008. On mechanization, see Lyall and Wilson III 2009.

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Appendix 1. Counterinsurgency Campaigns and Leadership Decapitation

Campaign	Years	Decapitation	Outcome (Government)
First Kandyan	1803-04	1	1
First Serbian Uprising	1804-13	1	1
Peninsular War	1808-14	0	0
Tyrol	1809-10	1	1
Creek War	1813-14	0	1
Second Serbian Uprising	1815-17	0	1
Second Kandyan	1815-18	1	1
Two Sicilies vs. Anti-Monarchists	1820-21	0	1
Sardinia vs. Sardinian Rebels	1821	0	1
Greek Independence	1821-29	1	0
Dutch-Javanese	1825-30	1	1
Ottoman Empire vs. Albanians	1830-31	0	1
First Carlist War	1832-40	1	1
Second Semiole	1835-42	0	1
Second Carlist War	1846-49	0	1
Rogue River	1847-56	0	1
Mexico vs. Yucatan Maya Caste War	1847-01	1	1
Two Sicilies vs. Liberals	1848	1	1
Austria-Hungary vs. Viennese	1848	0	1
Taiping Rebellion	1850-64	1	1
British-Burmese of 1852	1852-53	1	1
Panthay Rebellion	1856-73	1	1
Sepoy Rebellion	1857-58	1	1
China vs. Niens	1860-68	1	1
British-Maorin	1860-70	0	1
Apache Wars	1861-86	0	1
War of the French Intervention	1862-67	0	0
Russia vs. Poles of 1863	1863-64	0	1
Dakota War	1863-65	1	1
China vs. Muslims of 1863	1863-77	1	1
Cheyenne War	1864-69	1	1
Ottoman Empire vs. Cretans of 1866	1866-67	0	1
Spanish-Cuban of 1868	1868-78	1	1
Third Carlist War	1872-76	0	1
Dutch-Achinese	1873-08	0	1
United States of America vs. Sioux Indian	1876-77	0	1
Little War (Cuba)	1879-80	0	1
Argentine War of the Desert	1879-84	0	1
Gun War	1880-81	0	0
Franco-Tunisian of 1881	1881-82	0	1
Tonkin War	1883-85	0	1

Campaign	Years	Decapitation	Outcome (Government)
Franco-Madagascan of 1883	1883-85	0	1
British-Burmese of 1885	1885-87	1	1
Can Vuong Movement	1885-88	1	1
Franco-Madagascan of 1894	1894-99	1	1
Ottoman Empire vs. Cretans of 1896	1895-97	0	0
Spanish-Cuban of 1895	1895-98	0	0
Brazil vs. Canudos	1896-97	1	1
Ottoman Empire vs. Druze	1896	0	1
Spanish-Philippi0 of 1896	1896-98	0	0
Hut Tax	1898	1	1
American-Philippine	1899-02	1	1
Boer War of 1899	1899-02	0	1
Colombia vs. Liberals of 1899	1899-03	0	1
Brazil vs. Lampiaos	1900-40	1	1
Ottoman Empire vs. VMRO Rebels	1903	1	1
Uruguay National Party (Saravia)	1904	1	1
South West African Revolt	1904-05	0	1
Yemen Secession	1904-11	0	0
Maji-Maji Revolt	1905-07	1	1
Rumania vs. Peasants	1907	0	1
Contestado War	1912-17	1	1
Caco Revolt	1918-20	1	1
Basmachi Revolt	1918-33	1	1
Irish War of Independence	1919-21	0	0
USSR vs. Peasants in Tambov	1920-22	1	1
Iraqi-British	1920-21	0	1
Italo-Libyan	1920-32	1	1
Rif Rebellion	1921-26	0	1
Irish Civil War	1922-24	0	1
Afghanistan Khost Rebellion	1924-25	1	1
Franco-Druze	1925-27	0	1
Mexico vs. Cristeros	1926-30	1	1
Sandi0 Rebellion	1927-33	1	1
Saudi Arabia vs. Ikhwan	1929-30	0	1
Saya San's Rebellion	1930-32	1	1
China vs. Communists of 1930	1930-35	0	1
Austria vs. Socialists	1934	0	1
Italo-Ethiopian	1935-41	0	0
Arab Revolt	1936-39	1	1
French Resistance	1940-44	0	0
Soviet Partisans	1941-45	0	0
Yugoslav Partisans	1941-44	0	0
Armia Krajowa	1942-45	1	1
Ukrainian UPA	1943-56	1	1
Greece vs. Communists	1944-49	0	1

Campaign	Years	Decapitation	Outcome (Government)
Indonesian	1945-49	0	0
Franco-Indochinese of 1945	1945-54	0	0
China vs. Communists of 1946	1946-50	0	0
Philippines vs. Huks	1946-54	0	1
India vs. Nagaland	1946-75	0	1
Franco-Madagascan of 1947	1947-48	0	1
Burma vs. Karens	1948-94	1	1
Malayan Rebellion	1948-60	0	1
Indonesia vs. Darul Islam	1948-62	1	1
Indonesia vs. Moluccans	1950-51	1	1
Franco-Tunisian of 1952	1952-56	0	0
British-Mau Mau	1952-56	1	1
Franco-Algerian of 1954	1954-62	0	0
Cameroon	1955-60	1	0
Sudan vs. Anya Nya	1955-72	0	0
China vs. Tibetans	1956-59	0	1
Cuba vs. Castroites	1958-59	0	0
Laos	1959-75	0	0
Thailand vs. Communists	1959-82	1	1
Republic of Vietnam vs. NLF	1960-65	0	0
Guatemala	1966-72	1	1
Iraq vs. Kurds of 1961	1961-75	1	1
Angolan-Portugese	1961-75	0	0
Guinea Bissau-Portugese	1962-74	0	0
0rth Yemen	1962-67	0	1
Aden War	1964-67	0	0
Mozambique-Portugese	1964-75	1	0
United States v. NLF	1965-75	1	0
Burma vs. Kachin Independence Army	1983-95	0	1
Dhofar Rebellion	1965-75	0	1
0rthern Ireland	1968-98	1	1
Philippines vs. NPA	1972-92	1	1
Peru vs. Shining Path	1982-95	1	1
Black September Uprising	1970-71	0	1
Cambodia vs. Khmer Rouge of 1970	1970-75	0	0
Pakistan vs. Bengalis	1971	0	0
Sri Lanka vs. JVP	1971	0	1
Philippines vs. Moros	1972-80	0	1
Zimbabwe vs. Patriotic Front	1972-79	0	0
Bangladesh vs. Chittagong Hill Tracts	1973-94	0	1
Nicaragua vs. Sandinistas	1978-79	1	0
Ethiopia vs. Eritrean Rebels	1974-91	0	0
Namibian	1975-88	0	0
Western Saharan	1975-89	1	1
Angola vs. UNITA of 1975	1975-02	1	1

Campaign	Years	Decapitation	Outcome (Government)
East Timorese	1975-77	1	1
Ethiopia vs. Tigrean Liberation Front	1978-91	0	0
Cambodia vs. Khmer Rouge of 1978	1978-97	1	1
Nicaragua vs. Contras	1979-90	0	1
Afghanistan/USSR vs. Mujahedin	1979-92	0	0
El Salvador vs. FSLN	1979-92	1	1
Mozambique vs. Renamo	1979-92	0	0
Uganda vs. National Resistance Army	1981-86	0	0
Sri Lanka vs. Tamils	1983-08	0	1
Sudan vs. SPLA-Garang Faction	1983-05	0	0
Nigeria vs. Muslim Fundamentalists	1984	1	1
Colombia vs. M-19	1984-90	0	1
India vs. Sikhs & Kashmiros	1985-93	1	1
Sri Lanka vs. JVP	1987-89	1	1
Papua New Guinea vs. Bougainville	1988-97	0	0
Rwanda vs. Tutsi	1990-93	0	0
Turkey vs. Kurds	1991-99	1	1
Algeria vs. Islamic Rebels	1991-02	1	1
Tajikistan vs. Popular Democratic Army	1992-97	0	0
First Chechen	1994-96	1	0
Pakistan vs. Mujahirs	1992-94	1	1
Kosovo	1996-99	0	0
India vs. Bodo (BLT)	1996-03	0	1
Nepal vs. Maoist Insurgents	1996-06	0	0
Second Chechen	1999-05	1	1

Table 1. Summary Statistics

Variable	Mean	Std. Dev.	Min	Max	Observations
Outcome (Win/Lose)	0.72	0.45	0	1	167
Outcome (Win/Lose/Draw)	1.49	0.84	0	2	167
Decapitation	0.43	0.5	0	1	157
Captured	0.16	0.37	0	1	157
Killed	0.29	0.45	0	1	157
Civilian Victimization	0.86	0.5	-4	1	158
Regime Type	0.26	0.44	0	1	167
Religion	0.59	0.49	0	1	166
Language	0.67	0.47	0	1	167
Insurgent Ext. Assistance	0.28	0.45	0	1	168
Rough Terrain	0.79	0.4	0	1	166
Incumbent Capabilities (log)	-1.71	1.15	-3.77	5.71	167
Communist Insurgency	0.17	0.37	0	1	168
Islamist Insurgency	0.04	0.2	0	1	168
Secessionist	0.51	0.5	0	1	168
Foreign	0.35	0.47	0	1	168
Inc. Mil. Exp. (log)	5	1.35	0.001	8.21	152
Distance (log)	3.13	0.68	0	6.64	168
Post-1945	0.46	0.49	0	1	167
Duration	7.47	8.58	1	54	167
Time	117.66	54.16	0	196	168
GDP (log)	18.47	73.35	7.42	770	107

Table 2. Logit Estimates for Determinants of Campaign Outcomes in Counterinsurgency Campaigns, 1803-1999

DV: Counterinsurgent Win/Loss

	1	2	3	4	5	6	7
Decapitation	1.92***	2.43***	2.41***	2.41***	2.36***	2.35***	2.03***
	(.60)	(.64)	(.69)	(.68)	(.66)	(.66)	(.75)
Civilian Victimization	1.79**	2.27***	2.51***	2.59***	2.47***	2.39***	2.66**
	(.75)	(.68)	(.61)	(.58)	(.58)	(.52)	(1.20)
Regime Type	-0.35	0.27	0.62	0.59	0.60	0.60	0.74
	(.43)	(.53)	(.59)	(.57)	(.59)	(.61)	(.69)
Religious Differences	-0.27	-0.17	-0.07	-0.07	0.05	0.05	-0.18
	(.53)	(.58)	(.68)	(.67)	(.75)	(.74)	(.90)
Linguistic Differences	-0.34	-0.16	0.31	0.31	0.12	0.19	0.21
	(.75)	(.79)	(.88)	(.88)	(.93)	(.92)	(1.10)
Insurgent Ext. Assistance	-2.56***	-1.91***	-1.73***	-1.70***	-1.74***	-1.74***	-1.44**
	(.49)	(.56)	(.57)	(.58)	(.61)	(.59)	(.60)
Rough Terrain	-0.57	-0.58	-0.38	-0.45	-0.34	-0.39	-0.50
	(.68)	(.70)	(.77)	(.76)	(.82)	(.82)	(.94)
Incumbent Capabilities	0.56*	0.87**	1.11***	1.39**	1.45**	1.88**	1.61
	(.30)	(.37)	(.40)	(.62)	(.61)	(.81)	(.98)
Inc. Mil. Expenditures		-0.82***	-0.93***	-1.10***	-1.05***	-1.37**	-1.24*
		(.22)	(.27)	(.40)	(.39)	(.65)	(.71)
Distance (log)			-1.09*	-1.17*	-1.24*	-1.26*	-0.97
			(.64)	(.65)	(.65)	(.67)	(.75)
Post-WWII				0.59	0.27	0.09	-0.22
				(.76)	(.81)	(.83)	(.81)
Duration					0.06	0.06	0.06
					(.04)	(.04)	(.04)
Time						0.012	0.02
						(.02)	(.02)
GDP (log)							0.08
							(.33)
Constant	1.66	5.39***	8.94***	10.20**	10.10**	11.30**	6.88
	(1.3)	(1.8)	(3.5)	(4.3)	(4.3)	(4.6)	(6.3)

	1	2	3	4	5	6	7
N	148 (61)	137 (58)	137 (58)	136 (58)	136 (58)	136 (58)	93 (45)
Wald Chi2	42	54.3	51.2	52	67.6	82.8	52.3
Pseudo R2	0.3577	0.4239	0.4442	0.4449	0.4572	0.4601	0.3777

*Notes: Robust standard errors clustered on country in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%*

Table 3. Ordered Logistic Estimates for Determinants of Campaign Outcomes in Counterinsurgency Campaigns, 1803-1999

DV: Win/Draw/Lose

	8	9	10	11	12	13	14
Decapitation	1.67***	2.06***	2.07***	2.08***	2.13***	2.14***	1.87***
	(.56)	(.62)	(.65)	(.64)	(.65)	(.65)	(.72)
Civilian	1.39*	1.46*	1.56*	1.55*	1.44*	1.46*	1.47
Victimization	(.78)	(.78)	(.85)	(.83)	(.83)	(.84)	(1.55)
Regime Type	-0.38	0.04	0.33	0.30	0.33	0.34	0.53
	(.39)	(.46)	(.49)	(.48)	(.48)	(.50)	(.64)
Religious	-0.20	-0.10	-0.03	-0.03	0.06	0.01	-0.21
Differences	(.51)	(.54)	(.63)	(.62)	(.69)	(.70)	(.82)
Linguistic	-0.52	-0.49	-0.11	-0.12	-0.31	-0.22	-0.08
Differences	(.69)	(.72)	(.81)	(.80)	(.88)	(.88)	(1.07)
Insurgent	-2.53***	-1.99***	-1.85***	-1.85***	-1.91***	-1.89***	-1.66**
Ext. Assistanc	(.48)	(.55)	(.55)	(.55)	(.58)	(.57)	(.64)
Rough Terrain	-0.42	-0.34	-0.14	-0.15	-0.01	-0.05	-0.32
	(.65)	(.66)	(.70)	(.70)	(.75)	(.76)	(.87)
Incumbent	0.30	0.51	0.69	0.70	0.79	1.28*	1.42
Capabilities	(.25)	(.31)	(.32)	(.54)	(.53)	(.74)	(1.00)
Inc. Mil.		-0.68***	-0.77***	-0.77**	-0.71**	-1.07*	-1.12
Expenditures		(.19)	(.22)	(.31)	(.32)	(.57)	(.69)
Distance (log)			-0.91	-0.92	-1.01	-1.04	-0.69
			(.66)	(.67)	(.66)	(.68)	(.77)
Post-WWII				0.04	-0.36	-0.57	-0.83
				(.73)	(.79)	(.81)	(.87)
Duration					0.07*	0.07*	0.08*
					(.04)	(.04)	(.04)
Time						0.01	0.02
						(.01)	(.02)
GDP (log)							0.02
							(.30)
cut1							
Constant	-1.96	-5.36***	-8.36**	-8.4**	-8.28**	-9.56**	-7.14
	(1.24)	(1.67)	(3.30)	(3.88)	(3.84)	(4.02)	(6.33)
cut2							
Constant	-1.56	-4.91***	-7.90**	-7.94**	-7.81**	-9.09**	-6.63
	(1.22)	(1.64)	(3.27)	(3.85)	(3.82)	(4.02)	(6.33)
N	147 (61)	136 (57)	136 (57)	135 (57)	135 (57)	135 (57)	93 (45)
Wald chi2	41.4	49.9	46.1	46.4	59.7	63.7	48.7
Pseudo R2	0.2781	0.3218	0.3348	0.3342	0.3514	0.355	0.3063

*Notes: Robust standard errors clustered on country in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%*

Table 4. The Conditional Effectiveness of Leadership Decapitation in Counterinsurgency Campaigns, 1803-1999

	15	16	17	18	19
Decapitation	2.24***	2.67**	2.48**	2.47***	
	(.66)	(1.06)	(1.03)	(.95)	
Decapitation* Communist Insurgency		-1.11			
		(1.59)			
Decapitation* Secessionist Insurgency			-0.43		
			(1.38)		
Decapitation* Occupier				-0.54	
				(1.18)	
Captured					3.02**
					(1.26)
Killed					1.43**
					(.63)
Civilian Victimization	1.68**	1.71***	1.64**	1.62**	1.65**
	(.66)	(.66)	(.66)	(.66)	(.68)
Regime Type	-0.12	-0.04	-0.11	-0.14	-0.44
	(.52)	(.54)	(.53)	(.52)	(.45)
Religious Differences	-0.22	-0.26	-0.19	-0.22	-0.41
	(.56)	(.56)	(.58)	(.56)	(.56)
Linguistic Differences	-0.20	-0.16	-0.19	-0.21	-0.29
	(.72)	(.75)	(.71)	(.73)	(.77)
Insurgent Ext. Assistance	-2.52***	-2.47***	-2.49***	-2.54***	-2.68***
	(.54)	(.52)	(.56)	(.55)	(.53)
Rough Terrain	-0.11	0.03	-0.11	-0.08	-0.557
	(.76)	(.87)	(.76)	(.77)	(.70)
Incumbent Capabilities	0.55	0.49	0.57	0.55	0.54
	(.35)	(.37)	(.36)	(.35)	(.30)
Communist Insurgency	-1.40**	-1.07*	-1.38**	-1.39**	
	(.60)	(.60)	(.63)	(.60)	
Islamist Insurgency	0.77	0.75	0.80	0.73	
	(.95)	(.97)	(.95)	(.94)	
Secessionist Insurgency	-0.57	-0.54	-0.49	-0.56	
	(.45)	(.44)	(.57)	(.44)	

Foreign Occupier	-0.57 (.61)	-0.54 (.61)	-0.59 (.61)	-0.44 (.63)	
Constant	1.87 (1.32)	1.48 (1.59)	1.87 (1.32)	1.86 (1.32)	1.83 (1.24)
N	148 (61)	148 (61)	148 (61)	148 (61)	148 (61)
Wald chi2	52	49.3	56.6	55.5	38.1
Pseudo R2	0.3957	0.3995	0.3964	0.3969	0.3716

*Notes: Robust standard errors clustered on country in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%*

Table 5. Predicted Probabilities

	Prediction	Std. Error	% Change
Baseline	0.399	0.204	--
Decapitation	0.842	0.098	1.11
Civilian Targeting	0.844	0.103	1.12
Insurgent Ext. Assistance	0.148	0.151	0.629
Rough Terrain	0.305	0.121	0.235

**Baseline: no decapitation, no civilian victimization, no insurgent external support, no rough terrain. All other variable*