Rebel and Regime Adaptation in a Civil War Setting.

by

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Submitted to the graduate degree program in Political Science and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirement for the degree of Master of Arts.

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Date defended: 15 April 2011
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Date approved: 20 April 2011
Abstract

Civil wars represent one of the most heinous forms of disagreement between human beings. The level of violence seen in some civil wars far outrank most interstate conflicts in casualty figures from pure military activity and civilian collateral damage. A civil war disrupts the political and economical foundation of a society and decimates inter-human relations to an extent where people turn against their own neighbors. Despite the destructiveness of these conflicts they are more common than wars between state actors in the post WWII period. Current research in the field is rather limited to large-\(n\) studies of civil war initiation and termination than devoted to understanding the dynamics behind the development of these types of conflict. The shortcomings in the literature are in most part attributable to the lack of appropriate data, consequently there has been little research into the development of the highly dynamic systems that develop in civil war settings. This thesis seeks to replicate the biological model of competing species in a civil war setting, in an attempt to confirm that regime and rebel adaptation decreases casualty figures, to a level where continued co-adaptation for interactive participants become unfeasible, thus ending the war. Simple hypotheses from current literature have also been identified and examined to discover if they apply to the case under scrutiny. The competing species model return results for the Spanish Civil War confirming the presence of interaction and that subsequent adaptation lowers casualty figures for both rebels and regime. Casualties are the main variable impacting a side’s ability to continue the conflict since a lack of soldiers eliminate the actor’s fighting potential thus ending the conflict.
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Introduction

Civil wars have profoundly changed the course of many countries around the world where rebels and regimes have fought for control over the state apparatus or for the right of secession and the subsequent establishment of a new state. Studying this type of conflict enables us to understand the dynamic of human interaction when disputes become intolerable and one of the involved actors feels that violence is the last resort. Previous and current research in the field of civil war tends to be cross-national comparison of aggregated large-N studies where lists compiled of many civil wars are analyzed using quantitative statistical methods. Many of these studies have certain criteria for giving a conflict the status of a civil war and the requirements employed vary greatly within the field and between different scholars. The lack of a uniformed approach to studying civil wars results in cases being added or dropped from the civil war lists and potentially influences the outcome of these studies. Another and perhaps greater shortcoming of these varying criteria is that by focusing on either the beginning or end of a civil conflict neglects the interaction between the parties involved. Casualty thresholds are often used to determine when a conflict becomes a civil war but this method leaves out important interaction between actors occurring before this threshold is reached. Studies focusing on how civil conflicts are terminated also miss the interaction between actors since they tend to see the existence of structural phenomena as explanations for peace. Studying the interaction between actors in a civil war setting, regardless of any requirements being met, results in a much greater understanding of how human beings behave in an environment filled with stress, hostility, fear, and death. Such studies show actors in a civil conflict adapting to their opponent’s tactics and strategies by adopting tactics and strategies of their own that minimize losses and inflict costs on the enemy. Rebels and regimes adapt to one another as part of a rational process by minimizing
own losses and maximizing results from own strategies while inflicting costs and minimize the effectiveness of enemy actions in the pursuit of control of the state. The interactive process described here is based on rationality and give agency to individuals as they attempt to either overthrow or defend the sitting government. Reducing casualty figures are important for actors as high casualties mean fewer followers or supporters and a decreased ability to fight the enemy for control of the state. Structural theories and explanation do not fully account for the types of activities found in civil wars and cannot account for the cases where structure is present but no civil war occurred. Agency is critical when studying civil conflicts because it is people that make and tear down structures considered unjust and unfair. Structures are therefore considered a possible motivating factor for why rebels attempt to overthrow governments and change the system but cannot be attributed as the main reasons for civil wars across the world. Without people structure could not exist; without structure people still exist. This thesis will give agency to rational and sometime irrational individuals overthrowing or defending regimes in various places in the process of studying rebel and regime adaptation in a civil war setting. The 1936 – 1939 Spanish Civil War will serve as the case selected for testing several hypotheses proposed throughout this thesis based on existing civil conflict research; the ultimate goal is to confirm the theory that adaptation between actors actually occur in civil wars. I will introduce a previously prominent theory of civil war origins and explain why it ultimately does cannot act as the foundation of this thesis. Current and previous large-n research on civil wars will be reviewed and serve as the theoretical backdrop for some of the hypotheses introduces while a dataset on the Spanish Civil War serves as the case for testing these hypotheses and the competing species model. The results are presented and discussed in a concluding section. The thesis first turns to
Relative deprivation and structural reasons for civil war

Gurr (1970) proposed that relative deprivation was the cause of conflict between people that eventually led to civil war. The theory states that people have certain expectations and claims to their government which in turn should provide its citizens according to their expectations. While there will always be a gap between citizens expectations and achievements of the regime it follows that a small gap would greatly reduce the possibility of rebellion while a large gap eventually leads to civil war. Inequality as perceived between people is inherently included in the theory of relative deprivation because it is how a person views his or her own standing in relation to other persons. It has been pointed out by several scholars including Reagan and Norton (2005, 321) that relative deprivation is nested in the psychological sphere of the human mind where “judgment is made relative to one’s own expectations”. When applied to violent struggle and potential overthrow of a regime the problems of relative deprivation becomes clear. Gurr’s analysis is located on the individual level while he claims it applies to the aggregate level but lacks an explanation of the link between the two levels that are separated within his theoretical framework for how civil conflicts are initiated. Critiques of the concept of inequality as the main driving force behind violent state-opposition are similar but differ at the same time. *Inequality* is judgment made by one person in relation to other persons within their own society and refers to the social, economical and political justice of a given society. *Communal injustice* is implied as the motive behind violent overthrow of a regime by the proponents of inequality as the causal mechanism explaining the onset of civil wars. Both relative deprivation and inequality are structural factors weighing down on a given population
causing them to rebel against that state’s government but structural factors do not attribute agency to the individual rebel or rebel leader behind a potential overthrow of a regime. No rational person would rebel because of inequality alone as there are no expected rewards for such action, meaning that the concept of inequality and relative deprivation are insufficient explanations for generating rebellion by themselves.

Definitions, criteria, and requirements

Civil wars often pose a tough nut to crack when it comes to defining what it is and what the processes leading up to it and its internal dynamic are. The empirical studies on civil war often use different working definitions of civil war and thereby affecting the rules underlying the coding process of their work. Nicholas Sambanis (2004) looks at how different coding rules with regards to civil wars can potentially change the inferences we draw from these dataset results in “What Is Civil War?” He finds that the working definition by authors studying civil wars vary leading to varying results but also impacts which conflicts are considered civil wars. Sambanis argues that the difference in civil war lists produced by different authors ultimately stems from how they view the answer to three fundamental questions in approaching civil war studies:

What threshold of violence distinguishes civil war from other forms of internal armed conflict? How do we know when a civil war starts and ends? How can we distinguish between intrastate, interstate, and extrastate wars? (Sambanis 2004, 815)

Authors of civil war studies answer these questions differently thus leading to different definitions and operational concepts for civil war lists. One seminal definition of civil war is “…any armed conflict that involves (a) military action internal to the metropole, (b) the active participation of the national government, and (c) effective resistance by both sides” (Small and Singer 1982, 210). Assuming this definition it becomes evident that a civil war has to take place
within a geographically limited territory where the government is one of the actors and that both sides are actually fighting for control of the territory or at least a portion of it. A simple and straightforward definition such as the one adopted by Small and Singer provides a starting point for analyzing civil wars. With this definition in mind this thesis will now examine various possible responses to the questions raised earlier by Sambanis.

The threshold for deaths needed for a conflict to qualify as a civil war varies between authors and between lists circulating in the community. 1,000 battle deaths annually has been the conventional wisdom acting as the threshold qualifying a conflict for civil war status (Small and Singer 1982). However, this *absolute threshold* may lead to several conflicts not being awarded the status of civil war and distort the recorded starting and termination points of a given civil war. As Sambanis points out Singer and Small did not include the Algerian case in their 1994 civil war list while Correlates Of War includes this case as a civil war starting after the conflict reached 1,000 battle deaths in 1992 (Sarkees and Singer 2001). Due to authors strict or lax interpretation of this rule lists of civil wars can include more or fewer cases depending on what the author sees fit for his or her purpose. This has lead to some adaptation of a *cumulative death criterion* in which the number of casualties of the conflict is averaged on each year; however, the problem of determining the start of a civil war remains. It also opens up the possibility of ‘creating’ many small conflicts instead of aggregating these conflicts into a single civil war. Fearon and Laitin (2003) attempted to solve this dilemma by setting the threshold to an average of 100 deaths per year of the conflict. However, this only moves the threshold around where a conflict with 1000 deaths over ten years is coded as a civil war while 1000 deaths over eleven years is simply considered a low-intensity conflict. When coding with a death threshold it is important to realize the limitations of adopting such a mechanism. For instance, the start and end
of violence can be hard to determine with either a rigid or lose threshold and some conflicts may be wrongly coded as civil wars and vice versa. However, the greatest implication of an absolute threshold is how it favors states with larger populations while downplays the importance of conflict in states with smaller populations.

It is dreadful to think that a great number of people have to perish in order for students and scholars of civil war to code the events as civil war; surely there are other ways of dealing with this issue? Sambanis suggest that we can get around the death criterion by counting battles instead but he also correctly brings up the disadvantages of this method. We would still need an arbitrary threshold enabling us to determine with certainty that a specific conflict is in fact a civil war. In addition, there are issues with low-intensity civil wars where most of the fighting does not occur as major battles but perhaps where hit-and-run or guerilla tactics produce more favorable results than head-on traditional military combat. The case of the civil war in Peru poses another issue for the battle criteria where a low-intensity war of attrition occurred in very similar terms to acts of terrorism making it hard to distinguish between the two (Sambanis 2004). The method Sambanis used in his 2004 investigative study is a per capita death measure. “If we added a per capita deaths measure to our coding rules, we would be less likely to miss armed conflicts in small nations that produced few deaths but were nonetheless dramatically important for the history of those countries” (Sambanis 2004, 821). This is a valid argument that deserves some attention due to its inherent logic. Large populations are not very affected by 1,000 deaths but the magnitude of such a scenario in a very small population is significant. Any conflict that fulfills every requirement that labels it a civil war except the death threshold would merely be characterized as riots or rebellions but with a per capita death measurement we are able to code more civil wars. The Dhofar Rebellion in Oman (1965-1976) was waged by the ethnically
organized Dhofar Liberation Front against the Sultan of Oman in that county’s mountainous region (Connor 1998). This case qualifies as a civil war with the exception of the death threshold. Also consider the Greco-Turkish war in Cyprus that started in 1963 where around 1,000 people actually lost their lives (Sambanis 2004). If only 500 Cypriots perished that would account for 0.001 of such a small population but in a country with 50 million such a proportion would have equaled 50,000 deaths; far beyond the needed arbitrary conventional death threshold needed to qualify as a civil war.

A civil war must have an opposing rebel side that wage effective resistance against the state. Of course there are different minimum criteria the rebel group has to fulfill in order to be classified as committed to effective resistance against the regime. Small and Singer (1982) created a minimum limit that would qualify as resistance if the stronger side was inflicted with at least five percent casualties. However, Fearon and Laitin (2003) introduced a numeric minimum of 100 state casualties for a rebel group to be considered effectively resisting the regime. A limitation with both of these approaches to measure level of resistance appears when a civil war changes its internal process and become genocide or politicide. During such a period where violence is mostly one-sided it is hard to imagine rebels effectively resisting agents of the regime. Yugoslavia experienced civil war in the early 1990 but there were also widely reported instances of ethnic cleansing. Determining whether the rebels are effective in their resistance of the regime becomes problematic because regimes are usually the strongest actor within a civil war and possess the possibility of limiting the effectiveness of rebel strategies. When rebel resistance dwindles the civil war ends and a new form of conflict may ensue, either in form of genocide or of politicide.
Limitations of current approaches

Much of the existing literature and research with regards to civil war focuses on aggregate factors that either contributes to onset of civil war, societal preconditions, or factors tending to end this type of war, but not the continuation of struggle once a civil war is initiated. Treating violence by aggregating factors and setting a minimum casualty threshold leaves out lower levels of violence still important but not included in the civil war lists developed by several researchers. Effectively leaving out any cases below the death threshold disregards the escalation process of how actors interacted in a particular case and how such cases are linked to the general development of the civil war. Studying only the factors leading to civil war or its outcome severely limits any understanding derived of the complex interaction occurring between the actors involved thus leaving gaping holes in any theory that only accounts for the mentioned initiation and termination of these wars. Steven Garrison (2008) alludes to the interaction between actors as a possible alternative explanation to some of the structural reasons given for civil war outbreak.

The escalation process between two actors in a civil war has been disregarded by adopting the casualty threshold needed to conduct large scale empirical research. The often used 1,000 death threshold does not consider the initial developments of a conflict where both sides are adapting to each other’s actions and strategies thereby missing this phase of the conflict where long term goals and tactics are being decided. “Recent case studies, however, demonstrate that civil wars more closely resemble volcanoes, in which lower level political violence simmers over time, below this threshold, before erupting into full scale civil war” (Sambanis 2005). If Sambanis is indeed correct in his civil war as volcano concept then it becomes clear that the civil
war list approach generally undertaken in current research does not capture the whole picture of how civil wars develop.

Actors in a civil war do in fact adapt to the activities of their opponents. Constraints and opportunities are imposed on the actors by the environment they operate in (Garrison 2008) and since it has been shown by Francisco (2000) that adaptation creates a feedback loop where one side responds to their opponent’s activities thereby creating a new environment that changes with each time period; actors are constantly adapting and readapting to their changing environment. When a state acts offensively against rebel forces the government imposes costs on rebel mobilization leading the rebels to adopt low-cost tactics such as guerrilla warfare. If the guerrilla rebels establishes a base in a certain territory it needs an effective logistical system to provide weapons, ammunition, transportation, food, shelter, and health care which are all operated by rebels themselves and their followers. Many of these people have been mobilized to support the rebels as they provide protection when violence escalades following a government offensive, thus providing a public good, protection, that the government does not provide (Regan and Norton 2005). “Over time, challengers experiment with various tactical, financial, and recruitment strategies, retaining those that succeed while abandoning those that fail” (Garrison 2008, 131). It is fair and intuitive to claim that rebel actors adapt to their ever changing environment by constantly adopting new tactics and strategies always seeking to minimize the burden from state imposed costs.

When rebels challenge the monopoly of violence supposedly only possessed by the state they effectively impose costs on the repressive actions of the state. Governments have to adapt to this new cost and weak regimes tend to escalate the violence with publically observable repression activities such as firing on demonstrators. This public repression induces even more
anti-government activities that needs to be addresses by the state; “Regimes then must adapt by developing less public forms of repression, such as clandestine death squads, use of torture, or population relocation that provide plausible deniability” (Garrison 2008, 131). It is again possible to argue that the state actor adapts when faced with a highly mobile and flexible rebel enemy. This opponent is of great concern to the regime if it maintains mobilization through highly effective adaptation as this calls for sustaining high levels of state repression and violence attempting to quell the rebel threat once and for all (Garrison 2008, 132).

Since the end of the Second World War there has been a steady increase in the number of countries experiencing at least one civil war within their borders. The proportion of world countries that had experienced at least one year of civil war peaked in 1990 at around 17 percent, four times higher than was the case in 1950, and then declined to around 12 percent from 1995 onwards (Hegre 2004). During this time period between 1-2 percent of the worlds countries experienced new conflicts while the remaining were ongoing. This trend has been confirmed by Fearon and Laitin (2003) as an increase in the number of conflicts with higher starting than ending rates while generally lasting longer than pervious. Clearly there is a need of studying civil war with its internal logic and actors to determine how these processes work, how they are prevented and ultimately terminated.

Current and Previous Civil War Research

Rebel motivation

Before a revolt and consequently a revolution can take place through means of civil war the rebel group must organize its followers and its structure to effectively manage such an undertaking. In *The Rebel’s Dilemma*, Lichbach (1995) proposes four solution groups on which
rebel groups could potentially mobilize sufficient number of followers in their pursuit of state control. A rebel group needs a public goal that make followers want to fight for that group’s cause; if the group does not enjoy support from the masses it tends to resort to acts of terrorism due to its public good being too narrowly defined (Lichbach 1995). He essentially gets to the core grievances that motivate insurgents but rebels are also motivated by personal gains through greed which is represented Lichbach’s market solution. Collier (2000) found empirical evidence indicating that greed is a driving factor in the location of civil wars due to its higher occurrence in places where natural resources are available for private predation. Civil wars where natural resources are readily accessible and at the same time a major contributor to rebel finances, tend to last longer than in wars without the availability of such resources; this is also the case with the availability of contraband resources such as ‘blood diamonds’ and drugs (Fearon 2004). Both the ‘grievance’ and ‘greed’ motivation factors are prevalent as underlining explanation for why rebels decide to engage in civil wars.

When citizens are mobilized by rebel groups there are usually two underlying factors that drive the organization of opposition against the state; grievances and greed. For Gurr (1970) grievances are represented by the deprivation of resources or political influence while greed symbolizes the material and economic gains pursued by people with a self-interested orientation. Regan and Norton (2005, 319) posited that “grievance-based issues are at the core of the process that leads to civil conflict but that ‘greed’ becomes salient when the rebel leadership begins to face a difficult task of motivating soldiers.” Grievances as posed by Gurr (1970) and Lichbach (1995) involve collective action on behalf of a group while also encountering obstacles to collective action. These problems are resolved by rebel leaders with the use of selective benefits for soldiers and supporters joining or maintaining loyal within the rebel group. This lead to the
articulation by Regan and Norton (2005) that rebel leaders are motivated by the grievance dimension as they seek increased political control either through victory or negotiated settlements while rebel soldiers are mobilized by opportunities of personal gain and increased standards of living, i.e. greed.

Examining how soldiers are motivated by select benefits to rebel against a regime indicates that the greed factor is indeed incorporating an economic approach to explaining civil war onset. “In effect, the argument presents an economic model of rebellion, in which participation is a form of crime and the rebels are criminals acting in pursuit of economic gains” (Regan and Norton 2005, 322). Selective benefits have the potential of being in the form of direct payments that could be found in capital rich organizations or it takes the form of plunder. While the way in which rebels are paid is not significant as an explanatory factor of the onset of civil wars but rather that they are indeed being paid for their ‘work’ in the rebellion. Payment both solve the collective action problem by increasing incentives to remain a member of the group and address the free-rider problem for any group providing a public good by increasing recruitment of new members through the distribution of these selective benefits. This rational perspective of motivation behind mobilization reveals that each follower is a self-interested actor even though Jane and John Rebel may be manipulated by the grievance rhetoric of rebel leaders.

It is important to keep in mind that without resources to fund opposition movements’ rebels would not receive payment and defection at high rates is a reasonable assumption. The importance of paying rebels for their services is clear to Regan and Norton as it decreases the occurrence of the free-rider problem, increases loyalty of rebel forces, and hinders tactics of the state to increase popular support for its policies:
the ability to pay private selective benefits only to those who participate in the rebel movement is vital to a movement’s viability … the greater the ability to pay these selective benefits, the more loyal the rebel soldiers and the more difficult is the task facing the state in trying to offer its own array of private benefits (Regan and Norton 2005, 326).

If rebels are in control of territory where natural resources are readily available the funding aspect of a rebellion tends to be solved by the extraction and sale of those commodities.

By focusing on the opportunity cost of individual rebels other explanations for motivation behind rebellion emerges. Places with poor living conditions are according to Walter (2004) a hotbed for rebel recruitment and civil war is more likely to recur in such places. Collier, Hoeffler and Söderbom (2004) found that where social inequality is high and average income is low wars tend to last longer on average lending support to Walter’s findings. The combination of these findings can be summarized as; where opportunity costs for rebels are low rebel recruitment is relatively inexpensive for a group seeking to increase its follower/support base. If this coupled with relative availability of natural resources or illegal sources of income then rebel mobilization should be higher in states rich in natural resources but with ‘poor’ masses. However, civil war in ethnically heterogeneous countries tends to be won by the government and not rebels (DeRouen and Sobek 2004). It would be reasonable to conclude that rebel organizations often rely on support from distinct ethnic groups and when such ethnic support is unavailable rebels are motivated by greed rather than grievances.

In the ‘dialog’ that is created in the interaction between the competing factions the opposition mobilize and carry out anti-regime activities while the government’s response is to remain in control of the state apparatus through repression of the rebel threat. As the rebel threat
increases over time the regime has the option of conceding to or repressing the new claim to power. At this point the cost associated with rebellion is low and rebel leaders usually have to provide selective benefits for members to maintain their loyalty. When the regime represses opposition groups the personal cost for rebels increases in addition to the opposition experiencing an increased rate of defection. To counter the cost of increased state repression on rebels their leaders have to increase the select incentives they provide members of their organization in order to prevent them from defecting at high rates. In situations like this protection is usually offered as rebels fear for their life and family while in situations when repression is low rebels receive selective benefits usually in monetary form. “Protection comes primarily in the form of shielding participants from the political repression meted out by the state, such that as the state increases repression, more people will mobilize around the rebel cause to avoid the abuse at the hands of the state“ (Regan and Norton 2005, 324). Rebels receive either ‘wages’ for their contribution to opposing the regime or protection when repression is severe; the state has the option of either conceding or repressing the rebels claim to power. Actions and reactions between rebels and regime is the cause of escalation from political protest to civil violence and war (Moore 1998).

For interaction to occur between two competing sides with the backdrop of civil war then evidence of one side reacting to the other side is necessary. Regan and Norton (2005) found that a very strong predictor of civil unrest was political repression.

… the more repression meted out by the state in year \( t-1 \) leads to less antigovernment protest in the current year. That is, repression seems to work as a means of intimidating the population; however, this seems to be true only in regard to lower level antigovernment activity. On the other hand, repression increases the probability of
rebellion and, quite significantly the likelihood of full-scale civil war (Regan and Norton 2005, 331).

This was evidence for the stance they adopted that civil war goes through a process starting with protest, riots, and rebellion that was finalized in that worst form of human suffering, civil war. The explanation to this phenomenon could stem from the probability of increased repression leading to greater protection offered by rebel groups thus increasing the number of rebels associated with the higher level of repression and increase their level of mobilization resulting in the outbreak of civil war. “…repression may work to quell small-scale protest, but when used in response to more severe threats to the state; it may actually lead to a higher probability of conflict” (Regan and Norton 2005, 333). The state’s decision to repress rebels should not be taken lightly as has been shown by Regan and Norton due to the risks of bringing about a large scale civil war that could have been prevented by other means. By setting their model to levels favorable to ‘peace’ they found that there was only a one percent chance of observing civil war given their data. Clearly repression does not always produce the wanted outcome for a state carrying out repression but rather rebels tend to respond to harsh state repression by mobilizing great numbers of their followers escalating the conflict into a civil war.

**Regime organization**

States that are experiencing great and seemingly insolvable difficulties combined with government officials that are not willing or able to attempt reforms might welcome strong and decisive military ‘heroes’ to steer the country back on course. Feit (1969, 485) call these types of men ‘iron surgeons’ due to their surgical approach to removing destructive elements of the current crisis stricken system. Further he notes that these men often do not fulfill their role as societal reformers. Let’s assume that the purpose of an army in the traditional sense is 1 – be a
tool to back up potential foreign policy, and 2 – be a security guarantor of the government and its officials. The armies of the iron surgeons tend to be small in size, only accounting for one percent of the population or less, they are often quite bureaucratic and obsessed with rank and strict order (Feit 1969, 485-486). A small army does not have the capacity to conduct and maintain military campaigns in foreign theatres neither in manpower nor adequate support equipment and facilities, therefore, it turns its attention inwards on issues of the domestic society. Feit (1969) notes that the preoccupation of order is how militaries reflect upon society and when a government initiates policies that are progressive and creates ‘disorder’ many military officials feel threatened. This disordered and threatening society is potentially favorable for a military coup but praetorian societies also present difficulties for a military.

A state suffering from the praetorian syndrome cannot maintain necessary order in their especially fragmented societies. Societal groups of the praetorian state do not overlap and are competing fiercely with others for the resources and services of the state (Rapoport 1962). This intensity is further emphasized by Samuel P. Huntington (1968, 168):

In a praetorian system social forces confront each other nakedly; no political institutions, no corps of professional political leaders are recognized or accepted as legitimate intermediaries to moderate group conflict. Equally important, no agreement exists among groups as to the legitimate and authoritative method for resolving conflicts. States that have experienced military intervention have had strong evidence of these characteristics and they exist in many countries that have the potential for such intervention in the future; due to praetorianism being intolerable for citizens and the bureaucracy wanting to restore order, armies are sometimes even welcomed as saviors (Feit 1969, 488). Little violence and loss of life is associated with coups in praetorian states as the regime does not mobilize any
supporters willing to risk their lives for that type of societal organization (Rapoport 1962, 74). It has been made clear that countries having experienced military coups shared a common set of societal characteristics that to a certain extent ‘justified’ an intervention to alleviate the tension existing between social classes. But how do the military rule once in control of the state?

Military coups cannot rule long by themselves after having taken over the state, but seek an alliance with professional civilian bureaucrats resulting in a military-administrative regime, whose main goal is to reform the unfavorable aspects of society. The bureaucracy is also preoccupied with order as the essence of organization is in its nature. These administrators carry out the policy decisions and executive acts of the government without violation as violation would undermine order hence undermine the bureaucracy’s own existence (Feit 1969, 487). However, the stated goals of iron surgeons are most often not delivered upon while the military-administrative regime rather builds on the tension between the already existing social groups, but is careful that no group dominates society. This form of equilibrium is a balancing act of magnitude as the military has to maintain it at all cost that the country can be united under military rule. Feit (1969, 490) characterizes the situation as follows: “What exists can be called cohesion without consensus. It is a cohesion that rests on the fear among influentials in the different groups that, if they break the uneasy coalition, they will not share in the resources that are distributed, such as wealth, power, and status.” The purpose of military rule is to unite or keep a country united and anything that upsets the balance of tensions interferes with that goal. Therefore, policies tend to be of a conservative nature as not to upset the balance between social groups thus effectively eliminating the possibility of enlightened and progressive policies emerging to solve the country’s problems (Feit 1969). Military rule ends when the balancing of social forces ceases and group hostility explodes. The military-administrative regime cannot
sufficiently address the grievances of and between societal groups through its use of cohesion without consensus which further prevents any reformation of society which is why the military intervened initially. When there is no longer cohesion within society the coalition of societal groups’ fall apart ending military rule.

**Regime vulnerability**

Regimes that are heavily dependent on the support of the armed forces for protection and societal policing activities are likely to be vulnerable to military coups if this relationship changes negatively for the armed forces. Active militaries engaged in numerous operations as both domestic police forces and as an instrument of foreign policy need considerable resources. Governments experiencing a decline in revenue can subsequently not allocate the resources needed by the military thus potentially creating a situation favorable for coups where militaries seek a greater piece of the pie for carrying on its operations (Thompson 1975). It follows that a negative shift, for any reason, in the allocation of resources to the armed forces results in a less favorable relationship with the government. Regimes highly dependent on its armed forces for security provisions are subjected to increased military control and ironically governments tending to depend heavily on their military are also the greatest threat to would be coup-makers (Thompson 1975). We are led to develop the following hypothesis about the military overthrow of civil governments:

**Hypothesis 1 –** The military will initiate coups when the policies of a civil government are perceived as threatening/unfavorable to the armed forces.

Is it possible that military leaders are just as rational as any politician or citizen of a given country and systemic explanations of coups do influence individual decision-making but does not necessarily dictate the outcome of such a process? Let’s examine some structural explanations before ultimately dismissing them.
Successful military coups exploit the fundamentally vulnerable aspects of the state in their struggle to overthrow the sitting regime. “Most of the explanatory paths taken in pursuit of regime vulnerability can be roughly, if not always charitably, clustered under five thematic headings: (1) legacies; (2) the failure of democracy; (3) the filling of the void; (4) the middle-class spear carriers; and (5) the disjointed system” (Thompson 1975, 460). These five areas providing explanation of regime vulnerability will be briefly addressed below.

1. **Legacies** – pull of the past events characterizes this explanation where unique historical and cultural legacies dominate the current political climate and “little more need be said to explain current political behavior’ (Thompson 1975, 461). If a government is either too weak or too strong it is due to past historical events and that country’s culture dictating how politicians and other leading figures conduct themselves in their affairs.

2. **Failure of democracy** – erosion of democratic norms and traditions stems from public abandonment of representative institutions according to Emerson (1960). He states that the absence of preconditions favorable to democracy and the masses lacking experience with democratic traditions coupled with internal diversity leads society down a path resulting in either military rule or the creation of a one-party state.

3. **Fillers of the void** – areas previously under foreign control gaining their independence does initially not have the required political traditions of strong democracies and may be incompetent or simply not have the knowledge to act thereby leading to a political vacuum. This vacuum will eventually be filled by the military aimed at changing the government according to popular desires or prevent a full out crisis within the political sphere (Thompson 1975, 462).
4. **Middle-class spear carriers** - the modernization of a state and subsequently of its armed forces creates a new middle class in search of political outlets. Military officers most often evolved into representatives of a new wage-earning middle class aligned with the desires of the civil middle class. “As the vanguard and standard bearers of social reform and nationalism, they could hardly be expected to resist the temptation to remove a recalcitrant and traditional ruling elite” (Thompson 1975, 463). And Huntington (1968, 207) puts it: “…the middle class makes its debut on the political scene in the epaulettes of the colonel.” Simply stated, the middle class challenges the traditional ruling elite through its ‘alliance’ with the officer corps in the political arena for greater access to political power.

5. **The disjointed system** – a society’s political culture is directly and negatively associated with the level of military intervention according to Finer’s (1962) findings. High political culture exists and should deter military coups when the foundation of the ruler is justified by the public, the civil organs of government deserves authority, and when citizens accept and participate in the institutions of the political system (Finer 1962, 83-89). Conversely, states lacking political culture should experience a higher frequency of military intervention.

These five themes presented above explore a common ‘fact’ about military coups; the armed forces get pulled into intervention in civil society when a political system is weak. However, these explanations of the structural pull forcing armed domestic intervention leaves out important alternative explanations such as individual agency and rationale behavior. If the structural explanations are generally correct we expect every weak state to experience a military overthrow of the government and not a select few where other conditions also apply. As Thompson (1975)
critiques the above themes and how they explain military coups he emphasizes the pull mechanism further. If a military is necessarily pulled into action that defective system should need correction so to prevent further pulls. However, he finds that in only eight percent of his cases does the military actually initiate reform policies, leading us to believe that systemic pulls are not effective explanations of why coups occur. Is it not possible that military coup leaders and followers are interested in the economic gains associated with a takeover of government instead of moralistic intervention based on preserving society and preventing the destruction of the country?

**Coup resistance**

Once a military coup has been successful it is hard to overthrow that regime, however, it is possible to halt the coup en route. During a military coup the armed forces utilizes tactics that resemble how it would operate in a foreign campaign domestically and all states are vulnerable to coups from the military as it is the only governmental institution with the amount of firepower needed to either defend or overthrow the government (Roberts 1975). A country’s police uphold domestic law and order but is not a real obstacle to a military overthrow of government because it has tanks, mechanized infantry, and airplanes against at most a riot-control equipped police force. The main point of this argument is that if the security apparatus of a state turns on its government there is no government agency capable of defending the regime. “Any government embarking on one of these policies [expropriating foreign assets, reaching a peace settlement with a recent enemy, or reducing the size, functions or privileges of the armed forces] may find itself faced with the danger of a military coup conducted by its own forces, with or without the aid of foreigners” (Roberts 1975, 19). Roberts’ argument here is in line with Feit and Thompson’s view that militaries respond to domestic developments that potentially changes the
conditions of the armed forces negatively. He further explores the option of civil resistance halting an ongoing coup. Civil resistance is a political struggle utilizing non-violent actions against domestic threats (Roberts 1975). This form of resistance plays neatly with Feit’s cohesion without consensus concept as any military rule must rely on balancing social forces against each other. If most of society resists the coup military regimes cannot function because its rule indirectly relies upon popular acceptance.

Reducing the chance of a military coup taking place in the future is allocated to a good institutional system, general societal resistance, and foreign interventions against the military performing the coup. Roberts (1975, 20) state that an acceptable constitution, good governments, norms prohibiting armed forces intervention in domestic politics, and security measures within the military all help reducing the threat of military coups. First, militias and Para-military agencies can be formed outside the regular armed forces enabling them to act independently of the military during a coup, and protect the government if needed. However, such nonprofessional semi-military organizations have historically been rather unsuccessful at this mission according to Luttwak (1968). Second, foreign intervention against a coup actually presents the coup makers with a legitimate excuse justifying their involvement in domestic politics. General Amin of Uganda claimed that forces of the former President Obote, that Amin ousted through a military coup, entered from Tanzania justified his coup as he sought to protect Uganda from foreign invaders (Roberts 1975, 34). Last, citizens and politicians have the option of threatening the military regime with outright civil war if the military does not comply with civil demands.

However, as Roberts (1975) notes, the threat of civil war could potentially backfire by paralyzing the population out of fear for the coming bloody conflict thus again favoring the coup makers. The threat of violence and subsequent eruption of civil war in Spain (’36-39) show how a failed
attempt to overthrow the coup lead to almost forty years of military dictatorship under General Franco.

Military coups face internal obstacles preventing the armed forces from overthrowing the government of their country. A rank and file military organization that does in fact not carry out their orders without hesitation poses a great hinder to any coup as noted by Luttwak (1968, 19) and could split the military into different camps either loyal to the military leaders or to the state they have sworn to defend. Conscript soldier poses another major obstacle to any military takeover of government as these fighters are not lifelong military persons indoctrinated in the service but remain closely tied with civil society they eventually will return to (Roberts 1975, 31). Concluding his remarks on civil resistance to military coups Roberts quotes D.J. Goodspeed (1969, 19) who state that the best form of deterrence against military coups: “is to show potential rebels that they would be faced with an intelligent, politically active and unsympathetic populace.” Civil resistance possesses the potential of either discouraging a military coup or make its hard to rule after the coup takes place, meanwhile coup leaders must overcome obstacles within the armed forces before they can embark on the mission to replace the civil government with military-administrative rule.

Duration

The takeover of a state through military coup or popular revolution tends to result in a short civil war due to the inherent tactics employed in these forms of attack on the sitting regime that are distinctly different from other forms of contesting control of the state. Both coups and popular revolutions take control of the government by relying on speed and decisiveness of action because in order for them to be successful they need to mobilize quicker than their opponents.
...coups and popular revolutions favor decisive victories because they tend to be initiated at the center in the hope of triggering a tipping process [resulting in mass defections within the regime], whose outcome is a lottery. Potential coup leaders cannot negotiate deals in preference to the coup lottery because the offer to do so would lower their odds to practically nil, eliminating their bargaining power (and possibly their lives) (Fearon 2004, 277).

Several coups and popular revolutions have turned into civil war due to the escalation of violence occurring in the capital during or after moves have been made aiming at ceasing power from the government (Fearon 2004, 280). Fearon (2004, 208) also found that civil wars initiated by coup style overthrow of the government has a mean duration of 3.1 years while the median of the number killed in this type of takeover was roughly 4,000 people, compared to a mean duration of 9 years for non-coup-initiated-civil-wars and a mean number of killed around 29,000 people. These findings indicate both that civil wars originating with a coup are relatively short and relatively few people perish in this type of initiated war. Other types of initiated civil wars aim at completely different objectives such as a periphery insurgency where rebels try to deliver a decisive blow disabling the opponent to fight or establish a favorable settlement. In wars of secession insurgents want a piece of territory acting in much the same manner as periphery insurgencies. Those types of civil wars tend to be protracted conflicts lasting quite long and experiencing much higher casualty numbers on average as they utilize inherently different tactics to obtain their goal than a coup initiated civil war that shock the regime and hope-for mass defection within the state apparatus. The following hypothesis is developed based on the above research about coup initiated civil wars and the number of dead in those conflicts:

Hypothesis 2 – Coup initiated civil wars are associated with low casualty figures.
State capacity and the strength of its military are important factors influencing the duration and outcome of a civil war. Usually rebels attack the government when their situation for whatever reason becomes too overwhelming leading the government to initially fight a defensive war. The power and effectiveness of state defenses are crucial early on but the balance of power between the state and rebels change over time especially if the rebel group lack finances. Herbst (2004) has observed several African governments and their response during a civil war and concludes that there are three parts to a civil war that develop over time:

…in the initial stage, the insurgency is generally small and should be easy to defeat. As the insurgency grows, the required organization, political support, and financing of the military campaign become ever more challenging to the government. Hence, effective counter-insurgency strategies require swift mobilization (Herbst 2004, in Hegre 2004, 248).

Many governments are not able to respond quickly as Herbst advises and such conflicts should last longer as the government allows the rebels to organize, grow and become more efficient over time. State limitation might lie in their intelligence apparatus, states may have limited resources to carry out counter-intelligence operations and the political system could have been designed so rigidly that it is unable to accommodate local developments especially if the state controls a large territory. DeRouen and Sobek (2004) confirms this finding in African cases where civil wars are unusually long and rebels win over government forces at a higher frequency than on other continents. Also, less intuitively, they found that the size of the government forces did not contribute to it chances of winning over rebel insurgents.

A major contributor influencing the duration and outcome of a civil war is whether or not there is external intervention on either one or both sides in the conflict. If intervention enables
one side to win a swift military victory then generally these types of wars are short in duration. However, only with external intervention on the side of the rebels is the duration of the war decreased (Collier, Hoeffler and Söderbom 2004); whereas intervention on the side of the government tends to increases the expected duration a given war (Balch-Lindsay and Enterline 2000). To extend this line of analysis Regan (2002) found that if both sides enjoy the support of external intervention then the likely outcome of the conflict tends to be a stalemate. His findings seems credible given the duration and outcome of Soviet and covert US involvement in the Afghan civil war where external intervention on both sides involved in the civil war produced a sort of stalemate that lasted a decade for Soviet involvement but the civil war itself is arguably still ongoing. Since foreign intervention has the potential to alter civil war duration according to previous research, a hypothesis embodying this finding is developed:

Hypothesis 3 – Foreign intervention on the side of the rebels decreases conflict duration.

Severity

Civil wars are the most destructive and common type of warfare. Between 1990 and 2002 only three wars were not civil wars, while according to Lacina and Gleditsch (2005) civil wars accounted for 90 percent of combat battle deaths and civilian casualties. Lacina (2006) created a then new dataset compiled of the Uppsala/PRIO armed conflict list and added total battle deaths in 114 civil wars between 1946 and 2002. This dataset saw deaths ranging from 900 which was her threshold, to around two million deaths in Vietnam; she regressed different variables that might have impacted the severity of civil wars. Her initial findings indicate that civil wars taking place during the Cold War experienced higher casualty rates than post-Cold War conflicts. The greater availability of external intervention or assistance is most likely the main contributor to this trend. During the Cold War both the Soviet Union and the United States fought proxy wars against each other in third party conflicts increasing the external assistance available for actors in
civil wars (Karp 1988). Wars of secession are not significantly bloodier than ‘regular’ civil wars.
There are differences between different continents in the number of civil war casualties:
   …conflicts in East and Southeast Asia killed the most people in combat, while wars in
   America, Europe and Central and South Asia have had the smallest battle death tolls.
   Europe’s wars are the only ones to stand out in terms of rate of fatalities, tending to kill
   relatively quickly; in fact, there have been only seven civil wars in Europe since 1946,
   and only one lasted for more than four years (Lacina 2006, 279).

Lacina (2006) empirically test three variable groups – state power, regime type, and cultural
   diversity – as variables influencing total battle deaths and found that battle deaths increase over
time. She finds the following variables do not influence the dependent variable at a statistically
   significant level: population size, state and rebel group strength, quality of the regimes military,
   GDP per capita, and terrain. The availability of foreign aid and intervention does influence the
   military severity of a given conflict and democracy does limit the severity of civil conflicts.
   “More democratic regimes are associated with smaller civil conflicts …as civil wars in
   democracies are expected to have less than half the battle deaths seen in conflicts in
   nondemocracies” (Lacina 2006, 287). With the availability of foreign patronage a hypothesis
develops for civil war settings:

   Hypothesis 4 – The availability and involvement of foreign patrons in civil wars are
   associated with increased casualty figures.

Other interesting findings are that neither diverse religion nor ethnic heterogeneity increases the
number of casualties in civil wars. The implication of Lacina’s finding is that her data does not
lend support to the hypothesis that ethnically diverse states experience bloody wars of
extermination at a higher rate than ‘civilized ideological’ wars.
Endgame

There are two possible endings to civil wars; military victory and negotiated settlements between the different sides involved in the conflict. Civil wars are intensely violent compared to international wars. Miall’s (1992) data show major violence in 15 percent of international wars compared to 68 percent of civil wars. The seemingly inherent violent nature of civil war poses a major obstacle to the termination of this type of war peacefully due to the combatants having to live and work with one another following a negotiated settlement. If we for the sake of argument believe that a certain geographical area can only be controlled by one side at the time during a civil war we can make further assumptions for the purpose of academic discussion. Given that a government loses legitimacy if it openly negotiates with rebels (Licklider 1995) a viable option would be to simply withdraw from a disputed area leaving the rebels in control. Rebels have made the struggle their life and are unlikely to abandon their hard earned spoils of war. Establishing a new rebel government in a limited territory, preferably where government forces have withdrawn, is a viable option but such an agreement with the government does not have any guarantee of being honored following potential rebel disarmament (Licklider 1995). The implications of negotiation for both governments and rebels seem obvious but at different levels. Regimes lose popular legitimacy if ‘caught’ openly negotiating with rebels while rebels face the uncertainty of governments actually abiding by the agreement after rebels lay down their weapons. In Licklider’s (1995) data one quarter of civil wars ended by negotiation and the remaining three quarters by military victory further indicating that negotiated settlements are unfavorable to both parties.
Wagner hypothesis

Military victory in a civil war destroys the capacity of the other side to effectively mount a resumed war effort. The Wagner hypothesis (Wagner 1993) states that: “Negotiated settlements of civil wars are more likely to break down than settlements based on military victories; consequently, the long-term casualties of negotiated settlements are likely to be greater than those of military victories” (Licklider 1995, 685). It is imaginable that a flat out military victory is so devastating that it destroys the opposition’s organizational structure to the degree where the opponent are unable to mobilize again if the peace treaty breaks down. This repressive ‘solution’ to civil war is the essence of the Wagner hypothesis. However, there is also a social change explanation where a group of individuals are granted great influence that they seek to hold and not surrender through settlement with unknown outcomes;

A negotiated settlement to a civil war is likely to result in veto groups that will not surrender power for social change whose impact on them is uncertain; but a military victory will destroy the power of such groups, making renewed conflict more difficult and allowing the government to act as it pleases (Licklider 1995, 685).

Of the 57 civil wars Licklider (1995) examined in his dataset there was a 50/50 chance that war resurfaced within five years following a negotiated settlement contrary to a 15 percent reoccurrence rate of war in cases where the conflict was ended by military victory. It appears that military victories produce a more stable postwar society than negotiated settlements meaning the Wagner hypothesis is generally confirmed.

Conventional wisdom dictates that wars between distinctly different identity groups should be harder to resolve due to the deep seated commitment of its participants. Individuals finding themselves in wars of identity may feel that the situation is literally about life and death
thus increasing their unwillingness to compromise on a negotiated solution that ends the war since no independent institution would effectively police the adherence to such an agreement.

“If identity wars are more intense than others, they would presumably be more likely to be ongoing, last longer, have higher casualties, and be more likely to involve genocide …it should be more difficult to end these civil wars with negotiated settlements than it is to end other civil wars” (Licklider 1995, 685).

As Licklider (1995) continues he finds that wars of identity are not distinctly different from political-economic wars, on the contrary non-identity wars have higher casualty rates than wars of identity. Following a deeper examination of casualties and especially genocide Barbara Harff (1992) determines that genocide involving more than one million casualties is more likely to occur in nonidentity wars at a rate of 60 percent compared to 13 percent in identity wars according to her case data. Therefore, wars of identity do not last longer and do not experience higher casualty rates; and most importantly they are not more likely to be associated with genocide than political-economic wars. Continuing, Harff (1992) reports that around 20 percent of the cases in her dataset ended by military victory experienced genocide contrasted to none where negotiated settlement ended the conflicts. This seems obvious since genocide can be viewed as a form of punishment bestowed on the losing side by the victor following a termination of hostilities, but Harff’s dataset is small and her conclusions are therefore unreliable. On the other hand “… genocide is less likely to follow the termination of nonidentity conflicts in general” (Licklider 1995, 687). The concluding remarks are as follows, (a) military victory tends to produce stability and chances of the conflict resurfacing are greatly reduced, (b) negotiated settlements have a 50/50 chance of experiencing a reoccurrence of war within five years, (c) identity wars produce lower levels of casualties than political-economic wars. (d)
Genocide may follow a military victory in an identity war, while (e) a negotiated settlement eliminates the chance of genocide following the end of an identity war. The following hypothesis based on the above research findings naturally emerge:

Hypothesis 5 – Military victory in a civil war leads to mass killings following the conflict’s termination.

Civil War Modeling

Over the course of thousands of years human beings have developed as a species into what we today recognize as the modern man. While this evolution has shaped us into different races with their own history, culture and way of life it has also rendered our genetically close relatives, such as the Neanderthal, extinct. Species rendered obsolete is not unheard of historically and has occurred as long as there has been living organisms inhabiting this planet. One underlying theoretical foundation of evolution and co-evolution can be traced to the science of biology where one, two or several actors or species interact with one another while coexisting within the same geographical location. The patterns of behavior these species develop are similar to patterns of behavior found between human actors in civil conflicts. For one species to survive it need an adequately large pool on individuals, and a space where the species can develop and thrive. Theories stemming from biology attempts to explain the patterns seen in species evolution and there are two that are more pertinent in application to human behavior and therefore this thesis.

Predator-prey model

The predator-prey model most accurately describes the events we have seen in societies around the world where one actor is victorious while the other defeated. This model is useful when examining societies experiencing protest and repression because it allows each side to act
independently of whatever acts are carried out by the opposite side. In practice the model contains “a parameter for protest arising without repression, another for repression arising without protest, in addition to two interactive parameters, one for the change of protest and one for the shift of repression” (Francisco 2009, 6). Protests are often measured as the days citizens protest and repression is simply the result of regime acts to curtail protesters, often measured in protesters killed, arrested, or injured (Francisco 2009). However, this model does not adequately reflect the events that take place during civil wars since the actions of the involved actors tend to depend on the actions of their competitor in a struggle for survival.

**Competing species model**

Civil wars operate according to different mechanisms than what is usually the case with states experiencing protest and repression since control of the state itself is the ultimate goal of all actors involved in this type of conflict. In these instances all actors compete for control of the state apparatus or for the right to secede and establish a new sovereign state with control over its own territory (Francisco 2009). This competition for control of state or right of secession results in actors adapting to the actions and strategies of their opponent(s) who in turn readapt to their adversary’s actions. The cycle of continued adaptation and re-adaptation is called co-evolution among species or in the case of civil war co-evolution between actors;

For coevolutionary ideas to apply in a particular system, the populations in that system must interact, or have interacted in the past, and must have been together long enough in space and time for the interaction to have had a realistic opportunity to cause evolutionary changes (Roughgarden 1983, 41).

Where simple protest and repression situations do not fulfill this criteria civil wars do and it is therefore a *competing species* model is ultimately the best fit given the reality of such conflicts.
Differential equations are used in finding the effect a civil war has on each actor since one cannot assume continuity even in civil wars due to a variety of reasons. The equations for determining the number of inoperative individual actors or casualties on both sides stemming from interaction are as follows:

\[
R_t = aS_{t-1} - m(R_{t-1} \times S_{t-1}) + \epsilon
\]

\[
S_t = bR_{t-1} - n(R_{t-1} \times S_{t-1}) + \epsilon
\]

“...\(R\) is the number of state forces captured, injured or killed, \(S\) is the number of rebel forces captured, injured, or killed, \(a\) is the rise in state casualties without interaction, \(b\) is the rise of rebel casualties without interaction, \(m\) is the dampening of state casualties with interaction, \(n\) is the dampening of rebel casualties with interaction, and \(\epsilon\) is the error term” (Francisco 2009, 7).

The result of this interaction might be a Red Queen situation where both actors involved are working hard just to keep up with the competition (Roughgarden 1983, 41). The Red Queen hypothesis quite accurately describes the arms race between the Soviet Union and the United States during the Cold War where both players were spending enormous resources to maintain a rough equilibrium in their destructive capabilities. One perverse effect of co-evolution is that while it often leads to the extinction of a species it also creates stability because the community becomes increasingly homogeneous and decreases interaction between remaining actors (Roughgarden 1983, 62). Thus co-evolution creates communal stability through species extinction and not through the ‘molding’ effect continued interaction tends to create. The resulting homogeneous society is thought to incorporate less hostility between individuals because a variety of reasons such as fairly similar culture, history, desires, and needs. However, we know that structural/cultural explanations do generally suffer from inadequate explanatory
power when it comes to cases of civil war. It is also important to remember what Licklider (1995) and Harff (1992) found with regards to identity wars; they tend to be less bloody than political or economically motivated conflicts but if ended by military victory genocide or politicide may follow. It would not be unimaginable to argue that societies experiencing mass killings following the end of a civil conflict become increasingly homogeneous thus increasing communal stability. The case chosen for examination by this thesis is the Spanish Civil War because it had interaction as will be shown later; it experienced foreign intervention, mass killings, was a relatively short war, and societal stability followed for almost four decades after the termination of the conflict. The Spanish Civil War is a classic military coup initiated conflict.

**Case – The Spanish Civil War 1936-1939**

Spain in the 1930s was a hotbed of political and social developments, and clashes that would have profound consequences for the future of the country and region. The Constitution of the Second Spanish Republic was ratified on December 9, 1931 and thereby ending the monarchical regime of Alfonso XIII who ruled through a dictatorship headed by General Miguel Primo de Rivera (Kenwood 1993, 4, Puzzo 1969, 12). Republican transformation of Spain experienced no bloodshed and little social disorder as it was the onset of the Great Depression that was the main contributor to this change of government, in addition to the ideas of Karl Marx and Mikhail Bakunin having taken root in Spanish society some time earlier (Puzzo 1969, 12). The new Spanish republic rivaled the individual freedoms and equality of the Weimar Constitution while Manuel Azaña’s government contrasted the actions of the French and Russian Revolution’s by remaining relative dormant in land and economic redistribution (Jellinek 1969, 122-123, Puzzo 1969, 13). Spanish society in the early twentieth century was rather polarized
between the wealthy and influential upper classes and the lower classes. Azaña’s socialist government remained a threat to the established Spanish elite and during the 1933 elections enough votes were mobilized for the political Right to win the election ushering in the “bienio negro” – Black Two Years – where control of the republic fell into the hands of the enemy government of Alejandro Lerroux (Puzzo 1969, 13, Jellinek 1969). During this two year period many constitutional provisions were not enforced as they were contrary to the rightist government thus ridiculing its creators and advocates. However, the Lerroux government did forcefully crack down on several uprisings in various parts of the country employing Spanish foreign Legionnaires and Moroccan Moors (Puzzo 1969, 14). This turn of historical events - where Moors set foot on the Spanish mainland for the first time since 1492 - would prove to be an indicator of what were to come in 1936.

The year 1936 was a decisive turn of events in Spanish history. Republican, socialist and communist parties created a *Frente Popular* coalition seeking to win the February elections and retaking control of the republic. Despite a rather bleak outlook the leftist coalition won 265 seats of the total 473 seats in the Cortes, the Spanish Congress, the Right took 144 seats while the Centre received the remaining 64 seats (Jellinek 1969, 217). The political right had spent vast sums of money to secure victory while also employing the services of the church that declared “A vote for the conservative candidate is a vote for Christ” (Puzzo 1969, 14), but nonetheless the Right-Center lost to the Popular Front by roughly 60 seats. Army Chief of Staff, General Franco, urged Prime Minister Valladares to declare a state of war the day after the election, so the military could prevent the victorious Popular Front from taking control of the government. But President Zamora and the Commander of the Civil Guard, General Pozas opposed such a military uprising (Puzzo 1969, 15, Jellinek 1969, 219, 312). A Para-military organization
opposed to a military coup acts as an obstacle to the overthrow of a civil government but empirical evidence suggests that these groups do disintegrate when facing well trained professional soldiers contesting for control of a state (Luttwak 1968). In the five months following the election the Popular Front were struggling internally with how their new won control of Spain should be put into policy while their labor organizations conducted numerous strikes disrupting social order and preventing any progress whatsoever. Meanwhile, military commanders and rightist politicians were plotting against the republic preparing for the looming clash bound to come. It remains fairly certain that the leftist government of ’36 posed a great threat to the interest of the military both for its importance in Spanish society and for future budget allocations. Hypothesis 1seems to be present in this case due to Spanish military leaders initiating a coup when civil policies threaten the armed forces.

The military plotters were fairly united, without opposition from within the military, and commanded the loyalty of the majority of junior officers leading them to not seek outside support or allies while preparing for the clash with the republican government. The plotting Generals felt they did not need civilian support as they controlled much of the junior officer corps, the professional Spanish foreign legion – the Tercio de Extranjeros – and the Moroccan Moorish Regulares (Puzzo 1969, 17). The unity of the Spanish military supports Luttwak’s (1968) arguments that without a military corps that carries out its orders without hesitation military coups are nearly impossible. Also, the use of professional soldiers circumvents issues of unreliability associated with conscript armies, as noted by Roberts (1975). With control of the military forces coup leaders such as General Mola, General Goded, and General Franco firmly believed in their superiority to that of the republican opposition. Political and public support came from various areas such as monarchists and Catholics while Juan March Ordinas – in
possession of one of the greatest fortunes in Spain at the time – provided funds for whatever military action deemed necessary (Puzzo 1969, 18, Alpert 2004, 53). The Para-military Civil Guard was also expected to potentially shift allegiance between the republican government and traditional strongmen leading the plotting Generals to calculate their cause would be relatively unhindered with regards to this potential obstacle.

Foreign intervention on behalf of the military was provided mainly and directly by Italy and Germany but also in part indirectly from Portugal. The Catholic and authoritarian Portugal under Antonio Salazar was a model state for the Spanish Generals of how they would organize their Spain once in control of the state; they were also permitted by Salazar to use his country as a base of operations (Puzzo 1969, 18, Alpert 2004, 52-55). Benito Mussolini saw a potential ally in Spain to counter British and French dominance in the Mediterranean and promised support and money to the Generals’ cause by preparing three squadrons of the Italian Air Force for potential duty in Spain (Alpert 2004, 39, Puzzo 1969, 19). Germany had historical and cultural ties with the Spaniards and following the Nazi rise to power the Germans started “the distribution of guns, propaganda materials, and money to right-wing elements” (Puzzo 1969, 20). If needed the Germans would provide even more support for the Spanish Generals. According to the findings of Balch-Lindsay and Enterline (2000) external intervention on the side of the government, tend to increase the expected duration of the ensuing conflict while intervention on the part of rebels tend to decrease a conflict’s duration. Of course it depends on our definition of long conflicts but external intervention enabling a decisive military victory for either side should also decrease conflict duration. Keep in mind that Fearon (2004) found the mean duration of coup initiated civil wars to be 3.1 years. The Spanish Civil War experienced foreign intervention of the part of the rebels, and knowing the duration of the conflict to be slightly less than three
years it follows that Hypothesis 3 was present in this case; foreign intervention on behalf of rebels abbreviate conflict duration. However, if there is intervention on both sides a stalemate could ensue and determining duration becomes increasingly difficult.

The military uprising organized by the generals started July 17, 1936 in the Spanish protectorate of Morocco with parts of the army taking control of a few cities (Kenwood 1993, 15). The following day Madrid radio aired the government’s acknowledgement of the military uprising but calmed the population stating that republican forces had control of the uprising (Puzzo 1969, 21). Citizens loyal to the newly elected leftist coalition government rose against the coup in progress but the Azaña-Casares government was not comfortable with the thought of arming a citizen militia (Puzzo 1969, 22, Jellinek 1969, 219). It has been noted that President Azaña became increasingly desperate, and his dismissal and subsequent reappointment of cabinet attest to this observation; but the precious time that wasted between the first uprising and the moment when the new Prime Minister José Giral, armed a popular militia might have saved the republic according to Puzzo (1969). This action could and should be seen as the loyalist population adapting to the inevitable armed confrontation with rebel soldiers they knew was coming. It gives us an indication that this was not purely an elitist conflict where the masses were either kept in the dark or remained victims of propaganda; citizens had a genuine interest in protecting their new won freedoms embodied in the Second Spanish Republic. Popular uprising in the face of a military coup such as was the case in Spain confirms the findings and arguments proposed by Roberts (1975) that military uprisings have to overcome many obstacles including civil resistance to military overthrow of a civil government. A pattern emerged after fighting had broken out where the rebels remained strong in the north of Spain and in the southern parts where General Franco led the troops from Spanish occupied Morocco. The strait of Gibraltar and
its surrounding areas were heavily guarded by republican naval and air forces preventing General Franco crossing with his Moroccan army coming to aid his fellow generals on the mainland (Puzzo 1969, 26). He realized the need to break the blockade and accepted aid from Germany, Italy and to a lesser but nonetheless important extent from Portugal. 

Foreign intervention on the part of the rebels tends to abbreviate the duration of a civil conflict because it brings about the possibility of a swift and decisive military victory. According to Air Minister Hermann Göring’s statements during his trial at Nuremberg, Nazi-Germany came to the aid of General Franco and his fellow rebel generals because of strategic and economic considerations; however, testing military hardware, battle hardening air crews, and ideology were secondary reasons to the Franco-German alliance (Puzzo 1969, 28). Surprisingly Göring’s statement gains legitimacy when the situation is analyzed; a Nazi friendly Spain could threaten France and its possessions in North Africa but more important was the Spanish iron ore that helped keep the German armaments industry alive during that country’s future war (Jellinek 1969, 564). Contrary to German reasons for intervention in the Spanish Civil War Italy sought involvement based on a similar ideology and to gain personal glory for Benito Mussolini while the potential international repercussions for Italian interference were deemed low (Puzzo 1969, Alpert 2004). Also, Nazi aid to General Franco’s forces constituted mainly heavy equipment in form of bombers, artillery, vehicles and officer training; the Italians supplied the Spanish military uprising with infantry and related field equipment that enabled General Franco to continue the fighting in the later stages of the conflict when his own Moroccan forces had been severely depleted (Puzzo 1969, 30, Alpert 2004, 34, 93). Whatever Nazi or Fascist reasons for aiding the rebel military forces in Spain, it is obvious that German support was mostly quality oriented while Italian contributions were of a more quantitative fashion. Knowing the endgame
of the Spanish Civil War it is fair to argue that the complementary aid from two foreign ‘super-powers’ clearly enabled General Franco to win a fairly swift military victory over the republican opposition. Besides Nazi and Fascist involvement Portugal also played a smaller but integral part of foreign assistance to the rebellious generals. Prime Minister Salazar allowed German, Italian, and rebel soldiers and supplies to flow through Portugal en route to nationalist combat zones in the western areas of Spain bordering Portugal (Puzzo 1969, 31). The Portuguese also returned republican fighters fleeing Franco forces by hiding in that country; these militarists certainly faced death upon their return to Spain. “Salazar also sent Franco Portuguese military equipment and “volunteers,” more than 20,000 in all” (Puzzo 1969, 31). This form of support greatly enhanced the mobility of nationalist forces and the republicans could not bring about an escalation of the civil war into an interstate conflict by entering sovereign Portuguese territory. Salazar culminated diplomatic relations with the Spanish Republic on October 23, 1936 (Puzzo 1969, 31, Alpert 2004, 87) thereby fully aligning his country with a future Nationalist Spain.

Collective security was favored over balance of power following the end of WWI and Spanish republicans clung to the hope that international intervention would save them from nationalist forces. After all, the loyalist government of Spain had won popular elections earlier that year and represented the country’s legitimate government. However, France, Britain, and the United States refrained from aiding the legitimate republican government of Spain for a variety of reasons. Elements in France were eager to aid the leftist republican government in Spain but feared that such assistance would upset the delicate relationship with Great Britain. An upset in relations could result in British realignment towards the Germans at the expense of France (Puzzo 1969, Kenwood 1993, Alpert 2004). “The decision of the French government to deny the Spanish government the right to buy war materials in French markets proved the most
momentous in the diplomacy of the Spanish Civil War. Not only did it profoundly influence political developments in loyalist Spain, it put beyond doubt the ultimate defeat of the Republic” (Puzzo 1969, 36). Britain had considerable economic interests vested in Spain where much of British metal imports originated. A national government under General Franco was deemed unlikely to threaten ownership of British economic holdings whereas a republican-socialist-communist government was deemed a greater threat to those economic interests due to the tendency of far left governments to nationalize such industries (Puzzo 1969, Alpert 2004, 16, Jellinek 1969, 565). Nor did the British choose to abide by collective security but rather favored regional balances of power that would preserve peace in Western Europe (Puzzo 1969, 37, Kenwood 1993, 17). At the conclusion of the Great War the United States demobilized its wartime army and returned to an isolationist foreign policy that was of a rather conservative nature. U.S. and British foreign policy regarding the Spanish civil conflict shared similar views and both remained neutral (Puzzo 1969, 39, Kenwood 1993, 17). The great powers of Europe and the United States not intervening on the part of the legitimately elected republican government in Spain actually aided the rebels indirectly as they still received support from Hitler and Mussolini.

Collective security was the main reason why the Soviet Union got involved in the Spanish civil conflict on the republican side. The Soviets sought to establish collective security arrangements with western allies, including Spain, which would protect the Soviets if and when German expansion eastward was launched. German, Italian, Moors, and Portuguese serving with the nationalists accounted for 20,000, 100,000, 100,000, and 20,000 soldiers respectively; however, the Russian contribution to the republicans never surpassed 5,000 soldiers, officers, and support personnel (Puzzo 1969, 44). The drawback for the Spanish Republic with regards to Soviet
military and non-military aid was that Joseph Stalin required payment in the form of gold; more than half of the Spanish gold reserve amounting to over 500 million grams of pure gold went into the Soviet State Bank, Gosbank (Puzzo 1969, 45, Alpert 2004, 73). Soviet involvement was mostly limited to the sale and transportation of weapons to Republican Spain and personnel figures remained low throughout their involvement in the conflict. This kind of foreign involvement poses a problem for the theoretical and methodological approaches to this conflict. The small number but nevertheless present Soviets in Spain during this time argues for the case of active involvement on the side of the loyalists, but the demand for arms payments does suggest that the Soviets were simply selling weapons to an actor that could not buy weapons from other suppliers. The question remains whether or not to count Soviet activities and relations with the republican forces as foreign intervention on the part of the government? Clearly General Franco received foreign aid from Germany, Italy, and Portugal but the case is not as obvious with regards to the Soviets and Republican Spain.

The cause of the republic was deemed just in the eyes of the world and many foreigners arrived in Spain to fight for the ideals of the Second Republic. Compared to only the few hundred individuals genuinely volunteering to fight for General Franco more than 40,000 men fought for the republic in International Brigades (Puzzo 1969, 45, Kenwood 1993, 17, Alpert 2004, 74). French, German, Italian, and Americans represented the bulk of this force and most would expire fighting for the Spanish Republic. Both the Soviets and the many individuals pouring into Spain from all over the world, responded to the threat of fascism spreading on the peninsula with their acts supporting the Republic. These forces and Soviet aid maintained the republican ability to effectively resist the nationalists from overrunning the entire country. This large scale reaction to the threat against common ideals and freedoms considered sacred in much
of Europe and North America lends support to the notion that in face of great danger adaptation to a threat in the form of civil resistance to a military coup is necessary to preserve certain freedoms.

International recognition of General Franco’s regime, despite the lack of a total victory, showed the boldness of the rebel alliance with its foreign supporters. General Franco himself assumed control of the country and the title Head of State on October 1, 1936; his regime was recognized by Nazi-Germany and Fascist-Italy the following month, on November 18, 1936 (Puzzo 1969, 47, Alpert 2004, 88). Rebel forces could never occupy the capital of Madrid through a pure military victory as the republicans fought fiercely but only gained control when the city was yielded by loyalist forces (Puzzo 1969, 49). Following several significant military defeats and thousands of casualties, the Italians, who constituted the bulk of the rebel fighting force, retreated and left the Madrid area in late March 1937 (Puzzo 1969, 49, Jellinek 1969, 314). Retreating and regrouping has long been a necessary military strategy and it this instance the Italian forces saved numerous of their soldiers by reorganizing their mission in face of great and fierce republican opposition.

The adaptation of military strategies to that of the enemy minimizes losses. Preserving war material, combat troops, other equipment and supplies is essential to the continuation of a military campaign in any conflict. The adaptation and co-adaptation existing between two competing sides in a civil war setting confirms that both actors are acting rationally with regard to tactics used in seeking victory. After having been stopped in their attempt at capturing Madrid the rebels turned elsewhere and overran the region of Aragon followed by a mad dash to reach the Mediterranean coast in the region of Catalonia cutting off parts of the loyalist forces trapped in the pocket between rebel forces and the French border. General Franco turned south against
Valencia instead of capturing the entire Catalonia region as German advisors urged, but republican forces had dug in over many months in the mountains surrounding the Valencian plain (Puzzo 1969, 86, Jellinek 1969). It had usually been the rebels with great assistance by German advisors that had employed the tactic of digging in before a battle with the loyalists, but in the battle for Valencia republican forces employed this tactic to great effect. Their fortifications were so effective that neither heavy artillery nor aerial bombardment could beat their will to fight. Franco’s forces anticipated a roughly three week long campaign but suffered more than 20,000 casualties before the first week of the campaign was over, largely due to the heavy fortifications built by the defending nationalists (Puzzo 1969, 86). Adopting the traditionally rebel tactic of building heavy fortifications republican forces produced a major blow to Franco’s forces in the battle for Valencia in early July 1938 (Puzzo 1969, 86, Preston 1986, 143) ultimately resulting in a rebel withdrawal from the industrially and commercially important region surrounding the city. Following the rebel fiasco at Valencia republican forces crossed the Ebro River to the north of Franco’s main force forcing him to direct a large number of his men away from the Valencia campaign, and at the same time the loyalists captured almost 300 square miles of rebel occupied territory (Puzzo 1969, 86-87, Preston 1986, 149). The rebel forces led by Franco, on the other hand, commissioned a third of a million soldiers and superior numbers of aircraft, field artillery, and tanks in the campaign to capture Barcelona during the last month of 1938 (Puzzo 1969, 90, Bolloten 1991). Outnumbering the nationalist forces by more than two to one, Franco effectively adapted a strategy of overwhelming force that would both secure a quick victory and preserve as many men and as much war material as possible. Franco’s forces entered Barcelona after only a month into the campaign. “The collapse of Catalonia had been unexpectedly swift, the number of Spaniards fleeing to France suddenly becoming a horde”
Military tactics adapted in the face of an ensuing campaign can be of both offensive and defensive nature as shown above as long as such mentioned tactics minimize losses compared to not employing these tactics. Rebel and regime adaptation to one another minimize losses while potentially imposing costs on the opponent.

Mutiny within the ranks of the fighting branch of one side during a civil war leads to a considerable shortening of that conflicts duration. There has not been much previous research conducted in this field but in the early days of 1939 the republicans experienced a revolt within their own ranks. During this time the rebels controlled most of Spain except for Madrid where hundreds of people lost their lives every day from starvation, lack of medicine, clothing, fuel, power, and other essentials (Puzzo 1969, 94). Colonel Segismundo Casado, commander of the Republican Army of the center region surrounding Madrid, revolted against his own government lead by Negrín on March 5, 1939 (Puzzo 1969, 95, Bolloten 1991, 703) and effectively left the road to Madrid open for General Franco and his approaching rebel forces. The valor of the best republican forces that had hampered the progress of the military coup considerably over a period of years was now nearly erased as loyalists fought amongst themselves. The Spanish Civil War was officially ended by General Franco on April 1, 1939 when he stood victorious in the capital city of Madrid. His regime received diplomatic recognition from the United States the same day and had received recognition from Great Britain and France about a month earlier when the rebel victory was deemed inevitable by those two countries (Puzzo 1969, 93). The bloody civil war ended with more than half a million casualties. Compared to Fearon’s (2004) median of 4,000 casualties in a coup initiated civil war the Spanish Civil War was much bloodier than his finding suggest. Hypothesis 2 could be dismissed due to the bloodiness of the Spanish case that was initiated by a military coup; while Hypothesis 4, stating that the availability of foreign patrons
produces higher casualty figures than other initiated civil wars was present in the case under examination. However, the killing did not stop when the conflict was terminated. Between 1939 and 1943 it has conservatively been estimated that more than 200,000 people were executed or simply disappeared due to brutal penal conditions bestowed on those who opposed General Franco (Puzzo 1969, 96, Bolloten 1991, 677-678). These findings are somewhat consistent with Harff’s (1992) findings where a military end to a civil conflict tends to result in mass killings roughly 20 percent of the time since genocide or politicide is a form of penalty levied on the vanquished by the victorious. Hypothesis 5 appears to be present in the Spanish case where loyalists executed thousands of people that had opposed them or aided the republican government following the termination of the war. However, mass killings do never occur following a negotiated settlement ending a conflict, which in itself becomes an argument for international intervention in civil conflicts.

Case and data

The Spanish Civil War raging from 1936 to 1939 has been selected for examination in this thesis for application of the competing species model. This case has already shown a great variety of interesting variables such as foreign intervention on the rebel side but not directly for the leftist republican government. Great Britain, France, the United States and the rest of the world with the exception of the Soviet Union abandoned the Spanish Republic in favor of maintaining neutrality. The international community effectively took the side of General Franco and allowed Hitler and Mussolini to continue aiding the rebels. The fact that General Franco utilized primarily non-Spanish soldiers and how swift the military victory came about are other phenomena of interest not forgotten. Nazi and Fascist troops were also present in the ranks of rebel fighters and mainly operated the foreign war material Franco was given by his German and
Italian patrons. However, the international political climate at the time with Nazi and Fascist dictators acting as they pleased does somewhat obscure the fact that this thesis ultimately seeks to confirm that interaction between rebels and regime in a civil war setting occurs and dampen losses on the side(s) that adapt to their opponent. Casualty figures are products of reported arrested, injured, and dead soldiers on either side of the conflict, and are important as they measure a sides effectiveness of inflicting losses on one’s enemy. Remember that increased casualty figures decrease one actor’s overall ability to continue the struggle for control of the state apparatus.

The dataset used in this thesis was generously provided by Dr. Francisco and incorporate figures of arrested, injured, and dead among others for rebel and regime forces in addition to figures for workers and civilians. The unit of analysis for the dataset is individual days where rebel and regime activity has been recorded starting about a week before the Spanish Civil War erupted and stops roughly two weeks after the termination of the conflict to incorporate some of the mass killings that occurred after the military victory. For further examination the dataset is available on Dr. Francisco’s website: http://web.ku.edu/~ronfran/data/index.html. The basic equations used to test the dataset are taken from the competing species model:

\[
R_t = \alpha S_{t-1} - m(R_{t-1} \times S_{t-1}) + \epsilon
\]

\[
S_t = \beta R_{t-1} - n(R_{t-1} \times S_{t-1}) + \epsilon
\]

When the simulation was run on the Spanish Civil War dataset interesting results appear.

There are several problems with the data gathered on the Spanish Civil War; among them is the issue of heteroscedasticity. The existence of nonconstant error variance is not detrimental to time series analysis and is indeed present in the dataset examined by this thesis. The Breusch-Pagan test was run and reported chi-square values for lagged sums of protest and coercion. The
sum of lagged protest equation returned a chi-square value of 0.9539 while sum of coercion returned <0.0001; chi-squares in this case indicate that the equation for the lagged sum of protest suffers from nonconstant error variance but the second equation produced a very low chi-square that is not considered influential for this analysis. To correct for the presence of nonconstant error variance in the dataset the model incorporates a provision for generalized autoregressive conditional heteroscedasticity, GARCH that corrects this issue.

A second and more severe problem with the data under examination is the presence of serial correlation. The error terms of different time periods under examination tends to be correlated with one another therefore producing issues of serial correlation. Since serial correlation is almost always present in time series analysis the Breusch – Godfrey test was run for the last ten steps and returned concerning results. It appears that the equation with lagged sum of coercion experience some serial correlation at the level where it becomes problematic if not corrected. For instance; the Lagrange Multiplier ranged from 82.63 in the first step to 112.4 in the tenth step. The other lagged sum of protest equation does not experience similar difficulties. Yule-Walker equations correct serial correlation at any level and produces new and reliable estimates for the analysis.

Running the competing species model with statistical software SAS after correcting for heteroscedasticity and serial correlation provides the following results for the Spanish Civil War dataset:
Table 1 – Results from the Competing Species model for the Spanish Civil War

\[
R_t = aS_{t-1} - m(R_{t-1} \times S_{t-1})
\]

\[
S_t = bR_{t-1} - n(R_{t-1} \times S_{t-1})
\]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>(t)-ratio</th>
<th>(p(t))</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>0.0529</td>
<td>1.12</td>
<td>0.2612</td>
</tr>
<tr>
<td>(b)</td>
<td>0.6313</td>
<td>22.49</td>
<td>0.0001*</td>
</tr>
<tr>
<td>(m)</td>
<td>0.6323</td>
<td>22.52</td>
<td>0.0001*</td>
</tr>
<tr>
<td>(n)</td>
<td>0.0002</td>
<td>3.69</td>
<td>0.0002*</td>
</tr>
</tbody>
</table>

Eigenvectors: \(\lambda_1 = 0.7220\), \(\lambda_2 = -0.6058\)

\(N = 791\)

* indicates statistical significance

Recall from Francisco (2009, 7) that “\(a\) is the rise in state casualties without interaction, \(b\) is the rise of rebel casualties without interaction, \(m\) is the dampening of state casualties with interaction, \(n\) is the dampening of rebel casualties with interaction.” The Spanish Civil War saw foreign intervention on the part of General Franco’s rebel forces by German, Italian, and Portuguese assistance while the Spanish Republic could not mobilize a foreign patron and had to purchase weapons and supplies mainly from the Soviet Union at a great expense. France, Great Britain, and the US officially remained neutral for reasons already mentioned. The reported eigenvalues confirm that the system remained stable and in equilibrium throughout the duration of the Spanish Civil War. Stability occurs when eigenvalues are reported as real numbers and bounded between 0 and 1. This result conforms to what Francisco (2009) have already found with regards to civil wars, they are always stable and remain in equilibrium. All parameters are statistically significant in this case except parameter \(a\) representing state casualties without interaction.

Societal violence has sometimes been attributed to constituting a part of a cyclical system where violence cannot be understood properly without a backdrop against cycles of mass protesting (Della Porta and Tarrow 1986). Violence occurs, according to the cyclical explanation, as spikes of observed violence spread over the duration of observations separated by
time between episodes of violence. Cyclical violence would be depicted graphically as an oscillating system where spikes of violence are followed by a period of non-violence. The findings presented above with regards to the Spanish Civil War show that the system that developed does not conform to oscillation but are rather relatively stable. Stability does not favor certain levels of violence it simply means that engagement between the actors remained fairly stable for the duration of the civil war. The observations in the dataset supports this claim because the observations report major violence and clashes on a daily basis, and not episodes of violence separated by periods of inactivity. Francisco (2009) found the same with regards to several civil wars where the system of violence remained stable over the duration of a given conflict. The remaining results reported in Table 1 – Results from the Competing Species model for the Spanish Civil War will be discussed further below.

During the Spanish Civil War General Franco’s rebels were apparently struggling with containing the republican opposition before they engaged in a system of interaction and adaptation with their enemy. Parameter b show that rebel casualties were on the rise when interaction did not occur at a statistically significant level. Among the likely causes for this finding could be the thought of rebel military superiority over the citizen army of the republic or that the generals did not care particularly how many of their soldiers died as they were mostly non-Spaniards, Moors and Foreign Legionnaires. It is also arguable that the early stages of the conflict did not see much interaction as there had been few battles revealing what enemy strategies and tactics were used. Few and small battles mean little information to adapt by subsequently limiting the usefulness of interaction at this early stage. However, once the rebels started interacting with their enemy casualty figures decreased. Parameter n is statistically significant and measures the dampening effect of interacting with the opponent on a daily basis.
The case study showed that General Franco’s forces were severely depleted towards the end of the conflict and Italian troops made up the majority of rebel forces. Lacking interaction in the early stages of the war Franco needed to adapt in order to save his remaining army toward the later part of the struggle with the republicans. But Franco constantly received shipments of war material from Germany and Italy enabling him to resupply his weakened army while foreign field advisors helped further reduce casualty figures. Without having been able to mobilize foreign support General Franco and the rebels would undoubtedly have suffered much greater casualties.

The Spanish Republican forces did not initially suffer from rising casualty levels when they did not interact with Franco’s rebel forces. Parameter $a$ is not statistically significant; neither the $t$-ratio nor p-value even begin to approach statistical significance while the estimate remain low. Republican Spain did not receive the conventional foreign aid that the rebels did and had to purchase their supplies from the Soviet Union. The war material needed to be produced and transported to Spain which took time. If there was a rise in state casualties without interaction it could be because the hardware had not arrived from the Soviet Union and therefore giving Franco’s forces the upper hand due to superior rebel war material often flown in from Germany or Italy and not transported on ships like the Soviet war supplies. However, since parameter $a$ is not significant it would be futile to continue the discussion of its implications. Dampening of state casualties did occur with interaction as indicated by parameter $m$ which is statistically significant at a very high confidence level. The dampening of state casualties is also of a much greater estimate than rebel dampening with interaction. It is possible that the continuing stream of foreign military aid emboldened the rebels to a level where they became rather indifferent towards their casualty figures since they would be replenished with German
and Italian supplies rather quickly, thus negating the impact of such losses. Perhaps the loyalists were adapting at higher rates than rebel forces thus lowering own losses early in the war. Republican forces not receiving comparable foreign assistance would have to rationalize the use of their limited and untrained forces to avoid a total and swift rebel victory. Having to pay for their war supplies with great amounts of gold would further paralyze the loyalists because lost supplies would have to be replaced with the already limited funds available. It is not unheard that soldiers have been sacrificed to save expensive equipment. A great example of republican adapting to rebel tactics occurred during the battle for Valencia where loyalist forces turned a favorite rebel strategy against them by constructed heavy and nearly impenetrable fortifications. This move greatly reduced republican casualties compared to fighting the rebels in the open as they had done previously in the war. The statistically significant parameters $m$ and $n$ confirms that interaction between actors in a civil war setting does occur and does indeed decrease losses for the side(s) that adapt. It is safe to assume that without interaction and subsequent adaptation casualty figures for both rebel and republican forces would be considerably higher and the outcome of the Spanish Civil War might have differed from its actual outcome if interaction had not occurred.

A simple summary of the dataset revel interesting information about the tactics and strategies employed by both rebels and the regime during the Spanish Civil War. The first week of the conflict contained almost 150 different events ranging from strike and demonstrations to sieges and regular military battles all over Spain and Spanish occupied Morocco. Those days were the most eventful of the entire conflict as it is reported in the dataset. Conventional wisdom has it that, civil wars or any kind of military confrontation should vary greatly over duration as major battles are few, and the time between them has traditionally been viewed as a period of
relative inactivity among fighting parties. The results for the Spanish conflict show that it was stable throughout its duration. Findings such as this tell us that the conflict remained relatively stable at a constant activity level and does suggest that there were few breaks between major engagements. However, activity levels among rebel and regime foreign patron varies greatly. On one hand, the German Luftwaffe was active in the country from early to midyear of 1937 while the Italian Air Force took over about the same period the following year. German Luftwaffe planes also transported all of the troops from Spanish occupied Morocco to the Spanish mainland in the summer of 1936 enabling General Franco to carry the fight to republican strongholds. On the other hand, the Soviet Air Force only assisted the loyalists in the fall of 1936 by bombing a few cities occupied by rebel forces. This great difference in the level of direct involvement in the conflict by foreign patrons is a testament to the effectiveness of General Franco’s ability to mobilize foreign assistance. One of the foci of this analysis is the casualty levels of both rebels and regime during the Spanish conflict; this thesis will therefore attempt a few simple regressions with independent variables influencing our dependent variable; casualty figures.

Casualty figures of a civil war actor is actually a measurement of its enemy’s success due to the inherent difficulty of continuing the conflict if all one’s soldiers are dead. These figures include any type of activity that precludes fighters from being able to carry out the orders of their commander, and in this case include arrests, injuries, and deaths. Each side’s casualty figures are modeled by their enemy’s tactics and number of enemy soldiers engaged in each observation. Tactics refers to activities aimed at inflicting casualties on the enemy and include but are not limited to military battles, sieges, bombings, attacks, murder, executions, and the variables already included in the casualty figures for both rebels and regime. Whatever tactic employed on a certain day and the number of individual soldiers taking part in that action represents the
reported casualty figures in each observation. The results of these regressions are presented below and include correction for serial correlation.

**Table 2 - Regime Casualties**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t - ratio</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tactic: Anti-Aircraft</td>
<td>-22.6</td>
<td>1501.2</td>
<td>-0.015</td>
<td>0.988</td>
</tr>
<tr>
<td>Tactic: Arrest</td>
<td>45.2</td>
<td>1064.6</td>
<td>0.042</td>
<td>0.966</td>
</tr>
<tr>
<td>Tactic: Arson</td>
<td>5.6</td>
<td>1134.8</td>
<td>0.005</td>
<td>0.996</td>
</tr>
<tr>
<td>Tactic: Assassination</td>
<td>0.9</td>
<td>1225.8</td>
<td>0.001</td>
<td>0.999</td>
</tr>
<tr>
<td>Tactic: Attack</td>
<td>180.6</td>
<td>1065.3</td>
<td>0.170</td>
<td>0.865</td>
</tr>
<tr>
<td>Tactic: Battle</td>
<td>313.0</td>
<td>1062.2</td>
<td>0.295</td>
<td>0.768</td>
</tr>
<tr>
<td>Tactic: Blockade</td>
<td>0.1</td>
<td>1501.2</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Tactic: Bombing</td>
<td>103.6</td>
<td>1063.4</td>
<td>0.097</td>
<td>0.922</td>
</tr>
<tr>
<td>Tactic: Capture</td>
<td>252.2</td>
<td>1300.1</td>
<td>0.194</td>
<td>0.846</td>
</tr>
<tr>
<td>Tactic: Control</td>
<td>-21.0</td>
<td>1501.2</td>
<td>-0.045</td>
<td>0.989</td>
</tr>
<tr>
<td>Tactic: Cooperation</td>
<td>4.1</td>
<td>1501.2</td>
<td>0.003</td>
<td>0.998</td>
</tr>
<tr>
<td>Tactic: Coup</td>
<td>1.8</td>
<td>1501.2</td>
<td>0.001</td>
<td>0.999</td>
</tr>
<tr>
<td>Tactic: Decree</td>
<td>0.3</td>
<td>1300.1</td>
<td>0.000</td>
<td>0.999</td>
</tr>
<tr>
<td>Tactic: Demonstration</td>
<td>-1.9</td>
<td>1186.8</td>
<td>-0.002</td>
<td>0.999</td>
</tr>
<tr>
<td>Tactic: Deployment</td>
<td>0.4</td>
<td>1501.2</td>
<td>0.000</td>
<td>0.999</td>
</tr>
<tr>
<td>Tactic: Disarm</td>
<td>0.6</td>
<td>1501.2</td>
<td>0.000</td>
<td>0.999</td>
</tr>
<tr>
<td>Tactic: Dogfight</td>
<td>7.3</td>
<td>1146.6</td>
<td>0.006</td>
<td>0.995</td>
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<tr>
<td>Tactic: Escape</td>
<td>1448.5</td>
<td>1115.8</td>
<td>1.298</td>
<td>0.194</td>
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<tr>
<td>Tactic: Evacuation</td>
<td>55.7</td>
<td>1501.6</td>
<td>0.034</td>
<td>0.970</td>
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<tr>
<td>Tactic: Exchange</td>
<td>3.6</td>
<td>1501.2</td>
<td>0.002</td>
<td>0.998</td>
</tr>
<tr>
<td>Tactic: Execution</td>
<td>89.7</td>
<td>1099.6</td>
<td>0.081</td>
<td>0.935</td>
</tr>
<tr>
<td>Tactic: Extortion</td>
<td>4.2</td>
<td>1501.2</td>
<td>0.003</td>
<td>0.998</td>
</tr>
<tr>
<td>Tactic: Fleeing</td>
<td>12.9</td>
<td>1225.7</td>
<td>0.011</td>
<td>0.991</td>
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<tr>
<td>Tactic: General strike</td>
<td>1.6</td>
<td>1162.8</td>
<td>0.001</td>
<td>0.999</td>
</tr>
<tr>
<td>Tactic: Hostage</td>
<td>4.5</td>
<td>1067.5</td>
<td>0.004</td>
<td>0.997</td>
</tr>
<tr>
<td>Tactic: Imprisonment</td>
<td>551.9</td>
<td>1501.2</td>
<td>0.368</td>
<td>0.713</td>
</tr>
<tr>
<td>Tactic: March</td>
<td>17.0</td>
<td>1501.2</td>
<td>0.011</td>
<td>0.991</td>
</tr>
<tr>
<td>Tactic: Massacre</td>
<td>3002.5</td>
<td>1501.2</td>
<td>2.000</td>
<td>0.046*</td>
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<td>1501.2</td>
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<td>1146.6</td>
<td>-0.001</td>
<td>0.999</td>
</tr>
<tr>
<td>Tactic: Move</td>
<td>2.2</td>
<td>1300.1</td>
<td>0.002</td>
<td>0.999</td>
</tr>
<tr>
<td>Tactic: Move east</td>
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<td>1069.2</td>
<td>0.055</td>
<td>0.956</td>
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<td>Tactic: Move north</td>
<td>22.7</td>
<td>1099.5</td>
<td>0.020</td>
<td>0.984</td>
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<tr>
<td>Tactic: Move west</td>
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<td>1089.1</td>
<td>0.155</td>
<td>0.877</td>
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<td>Tactic: Murder</td>
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<td>1068.5</td>
<td>0.039</td>
<td>0.969</td>
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<tr>
<td>Tactic: Obstruction</td>
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<td>1300.1</td>
<td>0.002</td>
<td>0.998</td>
</tr>
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<td>0.964</td>
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<td>Tactic: Offer</td>
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<td>0.013</td>
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<tr>
<td>Tactic: Parade</td>
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<td>1501.2</td>
<td>-0.000</td>
<td>0.999</td>
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Tactic: Patronage 2.0 1162.8 0.002 0.999
Tactic: Preclude 3.0 1225.7 0.002 0.998
Tactic: Proscribe 7.6 1501.2 0.005 0.996
Tactic: Release 11.9 1501.2 0.008 0.994
Tactic: Resign -3.0 1300.1 -0.002 0.998
Tactic: Retreat 2788.7 1300.3 2.145 0.032*
Tactic: Riot 267.0 1146.9 0.233 0.816
Tactic: Rising 28.9 1077.7 0.027 0.979
Tactic: Shelling 3.0 1086.5 0.003 0.998
Tactic: Siege 6.0 1062.5 0.006 0.996
Tactic: Sniping 654.8 1501.2 0.436 0.663
Tactic: Strafing 11.0 1501.2 0.007 0.994
Tactic: Strike -2.0 1135.4 -0.002 0.999
Tactic: Suicide -11.2 1501.2 -0.007 0.994
Tactic: Surrender 9353.5 1225.8 7.630 0.000***
Tactic: Transfer 15.3 1501.2 0.010 0.992
Tactic: Transport 8.1 1118.9 0.007 0.994
Tactic: Victory 18.4 1501.2 0.012 0.990
Troops: Nationalist/Rebels 0.0 0.0 -1.463 0.144
Constant -0.212 1061.5 -0.000 0.999

*** indicate statistical significance beyond 99% confidence level
** indicate statistical significance at 99% confidence level
* indicate statistical significance at 95% confidence level

Table 2 shows the variables incorporated in modeling casualty figures of the Spanish republicans modeled by tactics and rebel troops. The act of surrender by republican troops to the rebels significantly increases casualty figures for the regime. Remember that casualty figures are comprised of arrests, injuries and deaths. In August 1938 28,000 loyalist soldiers surrendered to the rebels and subsequently became prisoners. This act increased total casualty figures by 28,000 while no republican soldier actually expired. Acts of massacre are fairly self explanatory as many men were killed during a relatively short time period. It is interesting to note that retreating is actually a tactic that is detrimental to republican troops. Shedding light on this rather mind baffling result is the knowledge that retreating soldiers are easy targets as many have their backs turned and only a small rear guard cover their retreating comrades. The reported values for retreating are statistically significant at the 95 percent confidence level and this tactic cost the
regime almost 2,800 soldiers on average. The situation is somewhat different for rebel casualty figures as reported by the dataset.

Table 3 - Rebel Casualties

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t - ratio</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tactic: Anti-Aircraft</td>
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<td>217.8</td>
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<tr>
<td>Tactic: Arms</td>
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<td>219.5</td>
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<td>0.957</td>
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<tr>
<td>Tactic: Arrest</td>
<td>-9.6</td>
<td>155.2</td>
<td>-0.062</td>
<td>0.951</td>
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<tr>
<td>Tactic: Arson</td>
<td>-2.3</td>
<td>164.7</td>
<td>-0.014</td>
<td>0.979</td>
</tr>
<tr>
<td>Tactic: Assassination</td>
<td>-4.4</td>
<td>178.3</td>
<td>-0.025</td>
<td>0.980</td>
</tr>
<tr>
<td>Tactic: Attack</td>
<td>4.0</td>
<td>154.5</td>
<td>0.026</td>
<td>0.980</td>
</tr>
<tr>
<td>Tactic: Battle</td>
<td>45.2</td>
<td>154.1</td>
<td>0.293</td>
<td>0.762</td>
</tr>
<tr>
<td>Tactic: Blockade</td>
<td>-6.0</td>
<td>217.7</td>
<td>-0.028</td>
<td>0.978</td>
</tr>
<tr>
<td>Tactic: Bombing</td>
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<td>154.3</td>
<td>-0.386</td>
<td>0.700</td>
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<tr>
<td>Tactic: Capture</td>
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<td>188.6</td>
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<tr>
<td>Tactic: Control</td>
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<td>217.8</td>
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<tr>
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<td>2177</td>
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<tr>
<td>Tactic: Coup</td>
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<td>218.6</td>
<td>-0.805</td>
<td>0.421</td>
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<tr>
<td>Tactic: Decree</td>
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<td>188.6</td>
<td>-0.062</td>
<td>0.950</td>
</tr>
<tr>
<td>Tactic: Demonstration</td>
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<td>172.3</td>
<td>-0.065</td>
<td>0.948</td>
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<tr>
<td>Tactic: Deployment</td>
<td>-6.6</td>
<td>218.0</td>
<td>-0.030</td>
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<td>Tactic: Disarm</td>
<td>-30.1</td>
<td>166.3</td>
<td>-0.138</td>
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<tr>
<td>Tactic: Dogfight</td>
<td>-5.2</td>
<td>161.8</td>
<td>-0.031</td>
<td>0.975</td>
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<td>Tactic: Escape</td>
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<td>0.841</td>
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<tr>
<td>Tactic: Exchange</td>
<td>5.7</td>
<td>217.8</td>
<td>0.026</td>
<td>0.979</td>
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<td>Tactic: Execution</td>
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<td>Tactic: Extortion</td>
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<tr>
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<td>177.8</td>
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<td>0.672</td>
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<td>Tactic: General strike</td>
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<td>168.8</td>
<td>-0.302</td>
<td>0.763</td>
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<tr>
<td>Tactic: Hostage</td>
<td>398.9</td>
<td>154.9</td>
<td>2.575</td>
<td>0.010**</td>
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<tr>
<td>Tactic: Imprisonment</td>
<td>-8.0</td>
<td>217.8</td>
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<td>0.971</td>
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<tr>
<td>Tactic: March</td>
<td>-15.6</td>
<td>217.7</td>
<td>-0.072</td>
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<tr>
<td>Tactic: Martial law</td>
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<td>218.0</td>
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<td>0.988</td>
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<tr>
<td>Tactic: Massacre</td>
<td>-7.3</td>
<td>188.6</td>
<td>-0.039</td>
<td>0.969</td>
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<td>Tactic: Mines</td>
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<td>163.3</td>
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<td>188.6</td>
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<tr>
<td>Tactic: Move west</td>
<td>-9.9</td>
<td>158.4</td>
<td>-0.063</td>
<td>0.950</td>
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<tr>
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<td>155.4</td>
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<td>0.772</td>
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<td>Tactic: Occupation</td>
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<td>167.1</td>
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<tr>
<td>Tactic</td>
<td>Offer</td>
<td>Parade</td>
<td>Patronage</td>
<td>Preclude</td>
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<td>0.000***</td>
<td>0.630</td>
<td>0.809</td>
<td>0.966</td>
</tr>
</tbody>
</table>

*** indicate statistical significance beyond 99% confidence level  
** indicate statistical significance at 99% confidence level  
* indicate statistical significance at 95% confidence level

Rebel casualty figures are determined by more statistically robust variables than the case was for the regime analyzed above. For instance, the results predict loyalist trooper to inflict rather small losses, 0.0007 rebel casualties per loyalist soldier but at the same time the variable is significant as a predictor of rebel casualty figures. This indicate to some degree that republican troops themselves were inflicting losses on the rebels; further suggesting that perhaps the republicans did not have much heavy military equipment, such as artillery or bombers, during their scrimmages with the rebels. In March 1937 the rebels traded all of their Basques prisoners in exchange for 2,000 of their own troops while reportedly suffering thousands of dead soldiers in the same time period. If the suspicious figures of reported dead rebel soldiers are removed the
exchange of prisoners remain statistically significant at but at a slightly lower level that is still within 95 percent confidence. On 10 February 1937 two Italian battleships block approaching republican cruisers preventing them from assisting loyalist ground forces. This tactic actually saved several hundred rebel soldiers as indicated by a negative coefficient and this estimate is statistically significant at the 95 percent confidence level. Holding hostages becomes significant since these figures are reported as arrests thereby increasing the overall level of casualties for the rebels. For almost two months during the summer of 1936 600 rebel troops were held hostage (arrested) onboard a ship in the harbor of Malaga but they all perished in subsequent air raids targeting the city. The hostage variable remains significant at the 99 percent confidence level.

Examining the reported results of modeling rebel casualty figures by tactic and enemy troops reveal variables that either inflict or decrease losses but only four variables are deemed statistically significant.

The Spanish Civil War dataset containing daily observations does contain problems that need be addressed. A Durbin – Watson test detects autocorrelation in a great number of lags of the dependent variable of casualties for both rebels and regime. Finding strong significance at all 35 lags tested for regime casualties suggests that the data is correlated and the same is true for rebel casualty figures while the trend of autocorrelation decreases from around the 26th lag and becomes insignificant. The issue is shown below in graphical form by graphing autocorrelation of the residuals for rebel and regime casualties.
Figure 1

Series residuals for Rebel casualties

The first lag always equals one and has therefore been removed from the graphical display above. The broken horizontal lines represent 95 percent confidence levels and the rebel casualty variable clearly breeches this at all lags. Regime casualty figures suffer from similar problems.
It appears that regime casualties suffer from even greater autocorrelation than for rebels. The Durbin–Watson test show higher values at more lags than compared to rebel casualty figures. As mentioned this was corrected for by Yule–Walker equations in the previous section.

This thesis seeks to confirm that interaction between actors in a civil war setting decreases overall losses with adaptation to the situation. In this endeavor the variable being examined is either rebel casualties or regime casualties as a decrease in losses would produce changes in this variable. Rebel casualties consist of the number of rebel soldiers arrested, injured, or killed in action. Regime casualties consist of the number of republican soldiers arrested, injured, or killed in action. The three variables compiled to create the two dependent variables are presented below in a graphical interface.
Figure 3

Rebel casualties during the Spanish Civil War
Figure 4

Rebel arrests during the Spanish Civil War

Rebel arrests

Time, by observations
Rebel injuries during the Spanish Civil War
Rebel deaths during the Spanish Civil War
Regime casualties during the Spanish Civil War
Regime arrests during the Spanish Civil War
Figure 9

Regime Injuries during the Spanish Civil War

Time, by observations
Figure 10

Regime deaths during the Spanish Civil War
The graphical display in Fig. 3 shows that rebel forces suffered from great casualty figures during the early part of the struggle for control of the Spanish state but seem to have learned with time how to reduce their losses. Is this an attribute of adaptation? It is very likely because adaptation can only occur when interaction is sustained over a certain period of time. The highest figure of nationalist forces that were ever arrested (Fig. 4) was merely 2,000 throughout the war and occurred twice. One time 2,000 rebel soldiers were regained in a prisoner exchange for Basques prisoners; the other occurrence was during the battle for Gijon when 2,000 nationalist fighters were held hostage by republican forces. During the republican siege of the rebel controlled northern city Oviedo, not far from Gijon, in February 1937 5,000 nationalist soldiers were injured, the highest figure throughout the entire conflict (Fig. 5). Figure 6 show rebel deaths from military activity where the highest figures occurred during the battle for Madrid in winter of 1936. The rebels could not over run the heavily defended city and suffered high numbers of killed combatants from battle related activities. It is worth noting again that General Franco’s forces could never take the capital city through military action and only gained control of it following the coup within republican ranks.

Total regime casualties seen in Fig. 7 indicate that republican forces suffered mainly during the middle and later parts in the struggle to contain the military uprising. The first of the two spikes represents the thousands of republican soldiers dying during the battle for Brunete, directly west of Madrid in the summer of 1937; the second spike reflects dead republican soldiers after the Italian Air Force dropped delayed-fuse bombs on buildings in Barcelona. In late August 1937 more than 28,000 Basques and republican troops surrendered while fighting the Italians at Santander in north central Spain. End of March two years later; 10,000 republican soldiers tried to escape from approaching nationalist forces but fail to reach safety and were
subsequently taken prisoner. Many of the injuries (Fig. 9) sustained by loyalist soldiers occurred during major battles such as the battle for Brunete and the Italian Air Force bombing of Barcelona. The thick column in Fig.10 stem from another major battle where the nationalists broke through the loyalist defenses surrounding the north central city of Bilbao in June 1937. All these events compile total regime casualties to occur mainly from the middle towards the end of the Spanish Civil War. This suggests that the rebels out-adapted the loyalists from around the middle to the end of the Spanish Civil War and actually increased the infliction of losses on their opponent.

**Concluding remarks**

Previous literature has produces several hypotheses with regard to trends found in civil conflicts and some of them were forwarded in the literature review section of this thesis. In order to examine how and where the Spanish Civil War falls within the existing research in the field they were addressed in the case study section. We will first look at which of these hypotheses apply to the case and then summarize the main concern of this thesis, namely that rebel and regime adaptation through interaction decreases casualty figures in a civil war setting. Table 4 depicts a summary of the hypotheses proposed by previous literature and if they were present during the Spanish Civil War. Each hypothesis has been addressed by the review of the case study though only at an instrumental level.

The Generals felt that the leftist coalition government was a threat to the traditional social order where military men were prominent figures in society and the armed forces received healthy budget allocations. However, there was no real repression of the generals mainly since
they controlled the military. The Second Spanish Republic did not even exist for half a decade before Spain was turned into a dictatorship under Franco suggesting that strong democratic institutions were absent in Spain. Republican leaders wasted their chance to end the military uprising early when they denied the arming of outraged citizens and the foreign assistance the Republic received only arrived after prompt payment was made. A total of more than 500,000 deaths occurred in the Spanish conflict leading us to doubt the applicability of findings from previous research stating that coups are relatively bloodless. General Franco commanded the allegiance of most of the armed forces at the time the uprising was initiated and willing foreign patrons aided his struggle for control of Spain and the duration of the conflict was relatively short. The heavy German and Italian meddling in Spanish domestic issues seems to be a case where foreign involvement is associated with overall high casualty figures. This thesis does not focus much on the time period after the end of the war but since the dataset and literature indicate mass killings it is worth mentioning that following the termination of the war hundreds of thousands were executed by the nationalists for aiding the republicans during the conflict.

Through this thesis I have examined and reviewed the current literature on civil wars and attempted to show that the Spanish Civil War confirms that rebel and regime interaction does
decrease losses for the interacting actor(s). It would therefore be beneficial for all rational actors seeking control of a state to interact with the opponent and adapt strategies that decrease the burden of losses. Applying the competing species model to the Spanish Civil War dataset produces statistically significant results at the 95 percent confidence level or above in three of the four parameters in the model. The main goal was to examine the dataset to find evidence for interaction dampening casualty figures; this was found for both the rebels and the regime thus confirming that adaptation decreases casualty figures for interacting sides. The literature review brought up several interesting hypotheses and I included a small provision to see if they were present in the Spanish case. Some were found to be present others were not present or are not known to be present. Overall the Spanish Civil War incorporated interesting features such as foreign intervention on behalf of the rebels but not for the regime, a successful military coup, relative short duration, but bloody, and followed by almost forty years of a stable military dictatorship under the victorious rebel General Franco where war did not resurface. Licklider’s (1995) findings; where a civil conflict terminated by military victory greatly decreases the probability of the conflicts reoccurring within five years seems to apply to this case. Also, his findings about mass killings occurring at increased frequency following a military victory to a civil war also apply to the Spanish Civil War. The tradeoff between stability and genocide does generally appear to guide foreign intervention in this type of conflict; however, foreign intervention only increased the success chance of the rebels and ultimately mass killings followed the termination of the conflict when Spain was ‘united’ under nationalist rule by General Franco in spring 1939.
References


