Choosing Sides: The Price for Battlefield Loyalty under Autocracy

Abstract

Are there long-term personal benefits to military service under authoritarian rule? This paper examines whether serving in the state's army or demonstrating explicit loyalty during a civil war offers protection from future repression when a new regime comes to power. Using original geo-referenced administrative data on World War I, personnel records from the White and Red Armies, demographic statistics, and Stalin-era secret police archives, I analyze whether veterans of the Russian Empire and the Russian Civil War were treated differently by the Bolshevik regime during Stalin's purges. The findings reveal that veterans were systematically targeted, regardless of their loyalty or battlefield heroism. I theorize that this pattern is driven by three mechanisms: threat perception, loyalty ambiguity, and bureaucratic visibility. Together, these results challenge conventional assumptions about wartime service and post-war reward, revealing how revolutionary autocracies often punish the very individuals who helped them rise to power.

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1 Introduction

The conventional image of the soldier is one of duty, patriotism, and sacrifice. Whether driven by ideology, fear, coercion, or hope for reward, wartime military service demands profound personal risk, including the willingness to sacrifice the most valuable human possession: one's own life. While it is often assumed that soldiers are driven by intrinsic commitments to country and honor, research shows that material incentives, social pressures, and expectations of future benefits also motivate many ordinary people to put their lives at risk (Krebs and Ralston 2022). A growing literature has examined how these varied motivations influence battlefield behavior and treatment (Lyall 2020; Ager et al. 2021; Huff and Schub 2021; Rozenas et al. 2022). Yet we know far less about the long-term benefits and consequences of fighting for the state—whether military service secures long-term protection and recognition, or whether sacrifice is forgotten, or even punished, when soldiers lay down their arms.

Understanding the effects of military service and veteran status on the civilian lives of soldiers is crucial for many reasons. Since the French Revolution, the idea of self-sacrifice—dying for one's country—has become a cornerstone of modern citizenship and citizen-soldier ideal. Past research has extensively examined the role of veterans in democratic states (Levi 1997; Reiter and Stam III 1998; Qian and Tabellini 2021), while the post-military fate of veterans in authoritarian regimes remains comparatively understudied. To the extent that military service and citizenship are foundational to the liberal social contract, it is customary to expect democratic states to provide equal treatment and recognition to those who serve (Parker 2009). But while democracies are generally expected to offer veterans recognition, protection, or compensation, authoritarian regimes face a different calculus. Revolutionary autocracies—states born from mass mobilization and civil war—may view their own veterans not as loyal allies, but as potential threats. Building on and extending an emerging body of literature on the long-term impact of military service, this paper is the first to examine this paradox directly.

Political violence is an authoritarian leader's primary tool of societal control. In such regimes, the needs of the state are considered superior to those of its citizens, and repressive power is rarely exercised with moderation. A tyrannical state punishes those it perceives as threats to its survival. Yet autocrats do not only punish; they also reward. Loyal citizens, particularly those who have visibly demonstrated their allegiance, may be rewarded with state protection, privilege, or recognition. Wartime veterans often play a crucial role in regime formation and survival, particularly during revolutions and civil wars, when mass mobilization and combat experience are essential to victory. Yet once power is consolidated, these same veterans may be recast as political liabilities. This raises a fundamental question: Do autocrats set aside their most powerful tool of control to honor the sacrifices of those who once fought for them?

This paper investigates a puzzling and understudied phenomenon: the systematic repression of wartime veterans under post-revolutionary authoritarian regimes. Nowhere is this puzzle more vivid than in the case of the Soviet Union. Between 1914 and 1922, the citizens of the Russian Empire experienced an extraordinary sequence of upheavals: mass mobilization during World War I, the collapse of imperial rule, and a brutal civil war that divided communities and families. What began as conscripted service in defense of the empire soon gave way to internal conflict, as former comrades took up arms on opposite sides of the revolution. Decades later, during Stalin's rule from 1922 to 1953, Soviet authorities sent millions of ordinary citizens, including many veterans and their families, to labor camps.

To examine how World War I and Civil War veteran status influenced the Soviet state's decision to persecute individuals, I focus on three armies: the Russian Imperial Army, the Imperial White Guard, and the Revolutionary Red Army. Service in these armies reflected distinct and often cross-cutting loyalties. Fighting for the Russian Imperial Army during World War I entailed extreme personal risk: nearly 3% of the entire male population died in battle, and another 8% were permanently disabled.[1] Of those mobilized, only 40% (primarily regular soldiers and reservists) had any prior military training (Gatrell 2014). The

revolution and subsequent civil war fractured these wartime allegiances. Veterans were often forced to choose sides: some remained loyal to the imperial regime, while others joined the revolutionary movement and took up arms against the state. Although divided, these choices nonetheless reflected profound sacrifice and commitment, either to the crown or to the Bolsheviks. This paper analyzes variation in military service and wartime loyalty across geographic units of Imperial Russia and investigates patterns of repression across the Soviet Union. Were veterans of World War I and the Russian Civil War, and their families, treated differently under Stalin's purges, especially those who had been officially recognized for their bravery?

The case of Imperial Russia and the Soviet Union offers a unique opportunity to study the long-term consequences of wartime service under autocracy. Russia's entry into World War I and its descent into civil war occurred before the creation of the Soviet Union. Yet it is impossible to understand Soviet state-building without examining the revolution that brought the Bolsheviks to power. The prolonged period of revolutionary warfare and accompanying social devastation shaped the character of the regime that followed. Unlike its imperial predecessor, and perhaps drawing lessons from that collapse, the Soviet state became a centralized and coercive autocracy—one that oppressed not only ethnic minorities but also its core ethnic Russian population. Citizens could be punished for the faintest suspicion of anti-regime sentiment, regardless of class or background. As a revolutionary regime, the Soviet state owed its very existence to the sacrifices of ordinary people: first, those who fought in World War I to defend the empire's borders; and second, those who fought in the revolution and civil war to secure Bolshevik victory.

Drawing on newly digitized archival administrative data from the Russian Civil War and Soviet secret police records, I construct district-, grid-cell-, and individual-level measures of repression and link them to enlistment records from World War I and the Civil War. To capture patterns of repression, I examine both direct persecution and intergenerational exposure through family members, using last-name matches between veterans and arrestees

in their birth regions. The granularity of the data allows me to trace individuals across time and space and to control for a range of geographic, temporal, and demographic confounders.

The findings reveal that the Soviet regime disproportionately targeted individuals and communities associated with past military service, including those who had fought for the revolutionary cause. The reward for revolutionary loyalty, in many cases, was intensified repression. I address alternative explanations, account for potential measurement error, and perform a series of robustness checks to validate the results. These findings speak directly to a fundamental question about the role of military service in autocratic regimes: whether recognized wartime sacrifice offers protection or invites punishment once the regime consolidates power.

These findings contribute to multiple bodies of research on political violence, military service, historical legacies, and revolutions. In the political violence literature, most work has examined the effects of repression on short- and long-term political and economic outcomes (Balcells 2012; Lupu and Peisakhin 2017; Rozenas et al. 2017; Zhukov and Talibova 2018; Rozenas and Zhukov 2019; Young 2019). A smaller set of studies that treat state repression as a dependent variable emphasize factors influencing whether, when, and to what end the states repress their citizens (Shadmehr 2014; Tyson 2018; De Mesquita and Shadmehr 2023). Yet few have empirically investigated how autocratic regimes select their targets (Gregory et al. 2011; Rozenas 2018). Understanding which individual-level characteristics the state takes into account when choosing its targets is essential to theories of state-citizen relations in information-rich authoritarian regimes and should therefore be of central interest to scholars of political violence.

Decades of research on military service have shown that it often has lasting positive effects on human capital accumulation and other tangible individual outcomes directly extracted from the service (Sampson and Laub 1996; Avrahami and Lerner 2003; Angrist et al. 2011; Jha and Wilkinson 2012; Eynde 2016; Leal and Teigen 2018; Bingley et al. 2022). However,

there has been little effort to systematically study the materialization of rewards in authoritarian regimes, where those rewards are discretionary. Military historians, economists, and sociologists have studied the consequences of veteran status across a wide range of socioeconomic and health outcomes (Berger and Hirsch 1983; Richard and Wilhite 1990; Angrist and Krueger 1994; Bedard and Deschênes 2006; Lee 2012; Eynde 2016), but most of this work focuses on observable material benefits, overlooking "silent" outcomes such as repression risk that are difficult to observe directly.

Similarly, the vast literature on civil wars and revolutions has explored when revolutions occur and succeed (Gurr 1970; Tilly 1978, 1992; Skocpol 1994), how they shape state-building and capacity (Besley and Persson 2008; Boix 2008; Arjona 2016; Cárdenas et al. 2016), and how they mobilize civilian support (Weinstein 2007; Mampilly 2012; Huang 2016; Stewart 2021). But the postwar fates of those civilians who supported revolutionary movements remain understudied. This paper advances these literatures by offering empirical evidence on a critical, unexamined outcome of political loyalty and military service: the risk of repression—both personal and intergenerational—in the aftermath of revolutionary war.

2 Theoretical framework

Military service in wartime serves as a litmus test for the strength of the social contract between the state and its citizens in any regime context. A state's capacity to wage war against a formidable enemy depends on the willingness of its citizens to enlist and fight (Levi 1997). Research shows that citizens in democracies with inclusive institutions are more likely to volunteer for military service or accept conscription, while exclusionary regimes tend to depress these motivations (Alesina and Ferrara 2005; Alesina et al. 2020). This reasoning suggests that the motivational sources of fighting might vary by regime type: indeed, prior work has linked citizen-soldier ideals with democratic states and extrinsic motivations with autocracies. While this is a useful heuristic, motivations for enlistment are rarely uniform within any

regime. Even in democracies, empirical research reveals considerable heterogeneity in why individuals serve, ranging from patriotic commitment to economic necessity, community ties, or legal obligation. Likewise, soldiers in authoritarian regimes may be driven not only by material incentives but also by nationalistic fervor, ethnic solidarity, or political conviction.

What distinguishes authoritarian settings is not the absence of idealism, but the fragility of the social contract and the high degree of state discretion in post-service treatment. Veterans in such regimes often lack institutional protections or formal mechanisms for recognition, leaving their fates subject to arbitrary state judgment. When past military training or revolutionary allegiance is seen as threatening, this discretion can result in targeted repression (Greitens 2016; Blaydes 2018). Wartime service imparts combat skills, organizational capacity, and leadership experience, which are assets in war, but liabilities under consolidated authoritarian rule. This logic aligns with broader theories of coercive responsiveness, which argue that autocracies repress in response to perceived threats to their authority (Davenport 2007), and with research showing that many of those threats often emerge from within a regime's own military and security institutions (De Bruin 2021).

The theoretical starting point is a simple observation: revolutionary regimes, by their nature, rely on extraordinary forms of mass mobilization, widespread violence, and participation to seize power. This often includes the recruitment—voluntary or otherwise—of large numbers of fighters. In the Soviet case, both World War I and the Russian Civil War generated vast pools of veterans, many of whom fought on the side that ultimately prevailed. Once in power, however, the new regime faced a strategic dilemma: Should it reward these veterans, reintegrate them, or eliminate them as potential rivals?

In revolutionary authoritarian regimes, veterans may be rewarded or punished depending on two distinct considerations. The first concerns wartime sacrifices made in defense of the nation-state during an interstate conflict, regardless of the regime in power. The second concerns the sacrifices of loyalists who helped overthrow a previous regime and bring the

current regime to power through internal conflict. In both cases, the state relies on citizen enlistment to wage war, even while recognizing that individual motivations may be mixed and that some participants could later pose political threats. As long as war persists and the regime needs citizens for its war-making efforts, it has incentives to maintain the appearance of reciprocity and continue inducting soldiers into the army. But once the threat subsides, that logic may shift. Military service is known to lower the costs of political participation and increase civic engagement (Brooks 2004; Leal and Teigen 2018). For revolutionary autocracies, this creates a dilemma because citizens with wartime experience, especially those who fought in revolutionary conflicts, possess both symbolic capital and practical skills. As a result, they may be perceived as credible political threats, even if they once supported the regime's rise to power. Based on this logic, I propose the following hypothesis linking wartime military service to postwar repression:

- H_1: Military training reduces the costs of political participation and enhances individual skills, thereby increasing the likelihood of selective state repression.

Not all veterans are equal in the eyes of the state. Some acquire more training, distinguish themselves in battle, or are decorated for bravery. Authoritarian regimes often have access to military records and award documentation, enabling them to selectively target those with the highest combat capacity. Veterans with military distinctions, in particular, may be viewed as more capable of mobilizing resistance, making them especially vulnerable to repression. A further implication arises from variation in the capacity and recognition of veterans, particularly those distinguished by combat performance or military honors:

- H_2: Higher concentrations of high-skilled, distinguished, and decorated veterans within local communities are associated with a greater likelihood of targeted repression.

General military service does not necessarily reflect loyalty to a specific political regime. Regardless of their motivations, most citizens cannot easily avoid wartime enlistment, and

evasion often carries high personal costs. In some cases, it may reflect loyalty to the nation-state itself—a broader, more abstract ideal—rather than to any particular political regime. Crucially, it does not require individuals to make a conscious or observable choice between competing political actors.

In contrast, choosing to fight on one side of a revolution or civil war is a qualitatively different act. Taking up arms for a challenger or defending the incumbent regime typically involves personal risk, and it often reflects an explicit political decision. While not all citizens have the opportunity or freedom to remain neutral, many do. And when individuals do choose to fight, their actions offer a public signal of political loyalty—one that may carry lasting consequences depending on the outcome of the conflict.

In authoritarian regimes, enlistment during an interstate war primarily entails personal risk on the battlefield. By contrast, participation in a civil war often carries broader consequences, potentially affecting not just the individual, but also their family and community. Because the cost of participation is higher and the signal of political loyalty more explicit, regimes may choose to reward those who helped bring them to power and punish those who opposed them.

Alternatively, individual loyalties may matter little once regime survival becomes paramount. Authoritarian rulers may view even their own supporters with suspicion, especially those with combat experience and a demonstrated willingness to fight. Veterans who once fought for the regime may be seen as untrustworthy or disillusioned, ready to subvert the regime that abandons or mistreats them. In such cases, the regime may treat them as potential threats rather than trusted allies. This leads to two competing expectations about the postwar treatment of veterans based on their revolutionary loyalties:

- H_{3a}: In revolutionary autocracies, leaders will treat veterans of the revolutionary movement and their families preferentially in the long term, while punishing counter-revolutionaries who opposed the regime's rise to power.

- H_{3b}: Authoritarian rulers who come to power through revolutions—or succeed revolutionary founders—will not necessarily distinguish between loyalists and counter-revolutionaries when employing coercive tools to consolidate control.

It could be argued that wartime participation does not necessarily signal strong ideological commitment. As scholars of civil war recruitment have shown, individuals often join armed groups under coercion, social pressure, or strategic calculation (Mason and Krane 1989; Kalyvas and Kocher 2007; Humphreys and Weinstein 2008). Soviet authorities were likely aware of these dynamics. In fact, this awareness may have heightened their suspicion toward veterans: if loyalty had once been contingent, it could shift again.

The central puzzle, then, is not why states fail to reward loyalty, but why they actively repress individuals who were once indispensable to their cause. I propose three mechanisms through which post-revolutionary regimes may come to view veterans as liabilities: (1) **threat perception** - veterans possess unique military skills, leadership experience, and often strong social capital, making them disproportionately threatening to authoritarian rulers once war ends, particularly in revolutionary regimes where the memory of mass mobilization remains fresh. (2) **loyalty ambiguity** - even veterans who fought on the winning side may be regarded with distrust if their motivations were instrumental, coerced, or ideologically shallow, raising the possibility of future betrayal, and (3) **bureaucratic visibility** - authoritarian regimes often rely on administrative records to identify and target potential threats. Veterans, especially those who received formal recognition, are more easily tracked and thus more likely to be targeted, regardless of their actual political beliefs.

These mechanisms generate distinct observable implications which suggest that if (1) threat perception is the dominant logic, we should observe greater repression of decorated or high-ranking veterans, (2) loyalty ambiguity is central, we should see both Red and White Army veterans targeted, (3) bureaucratic visibility drives repression, the state will disproportionately target individuals whose service is well-documented, regardless of their

role, rank, or allegiance. This logic is particularly acute in revolutionary authoritarian contexts, where regime insecurity and the memory of mass mobilization shape patterns of postwar governance.

3 Historical Background

To test the theoretical expectations, I examine whether service in revolutionary or counter-revolutionary forces during the Russian Civil War was associated with subsequent exposure to state repression in Stalin's post-revolutionary Soviet Union.

3.1 Imperial Demise in Two Wars

The collapse of the Russian Empire and mass mobilization of World War I and the Russian Civil War produced a generation of men whose battlefield experience, political exposure, and shifting loyalties would come to shape the Soviet regime's deepest anxieties. Understanding the scale, diversity, and complexity of veteran participation during this period is essential for grounding the theoretical mechanisms proposed earlier. It was in this context that veterans acquired not only military training, but also organizational capacity and symbolic capital—traits that later regimes would view with deep suspicion. This section provides the historical context for the emergence of veterans as politically visible, and often ambiguous, actors in the post-revolutionary Soviet state.

The Russian Empire entered World War I in the summer of 1914 with the largest standing army in the world, comprising 1.4 million soldiers and over 40,000 officers, almost all of whom perished in the first year of the war (Stone 2021). Facing an acute manpower shortage, the Tsar was forced to reverse the long-standing imperial policy of recruiting only "native-born Russians" into the Imperial Army. Wartime conditions prompted the state to incorporate previously excluded groups into its coercive apparatus, reshaping the relationship between

the imperial center and its peripheries (Lohr 2003). As a result, millions of non-Russians of military age were conscripted to serve on the front within a few months.[2] Countless imperial citizens, often mistreated by their own government, fought and fell in the trenches of World War I. As Naftali Fridman, one of the few Jewish MPs in the imperial parliament, observed, "The Jews... participated in the war in every respect just as did the other citizens. Many Jews received marks of distinction for their conduct at the front." (Hofmeister 2016) The scale and diversity of service left few corners of the empire untouched by the experience of war.

The political atmosphere across the empire in the lead-up to World War I was both repressive and divisive. For many marginalized citizens, serving within the ranks of the empire's most elite security institution offered a rare opportunity to stand out in the eyes of the state and a fragile hope for a better future if they survived. Despite the coercive environment, there was almost no recorded case of draft dodging. On the contrary, thousands of rural peasants and ethnic minority citizens volunteered to fight at the front (Wildman 2014). Most conscripted soldiers, however, came from overwhelmingly peasant and minority backgrounds. Few had prior military experience, and most lacked the training needed to confront modern, well-equipped, and adequately-trained European armies. As a result, Russia suffered one of the heaviest human tolls of the Great War.

Every enlisted soldier—whether conscripted or volunteer—faced similarly brutal conditions. The pace of wartime mobilization and the empire's lack of preparation meant that authorities could not meaningfully assign individuals to combat or non-combat roles based on their pre-war characteristics. Nor could they discriminate systematically between groups when determining who would be sent to the front or the rear. As a result, no consistent differences in exposure to risk emerged based on background. Despite initial resistance to inducting certain minorities, the state ultimately embraced mass conscription as its only viable option for wartime survival. Even so, poor preparation and growing domestic instability led Russia to withdraw from the war, having lost several territories and more than three-fourths

of its forces.

The Russian Civil War (1918-1922) was a transformative event in Russian and global history that led to the Bolshevik's rise to power and the formation of the Soviet Union. It followed a cascade of political convulsions: the February Revolution of 1917, in which Tsar Nicholas II abdicated and the country was declared a republic; and the October Revolution later that year, when the Bolsheviks overthrew the Provisional Government. In the wake of renewed attempts to overturn the October Revolution, a civil war broke out between the Imperial White Army and the Revolutionary Red Army.[3]

Veterans returning from World War I found themselves facing a new and deeply consequential choice. Having recently fought to defend the empire, they were now drawn into internal conflict. Should they seize the opportunity to depose the old regime, or remain loyal to it by fighting against the revolution? Many joined the Red Army and were later decorated for their service; others fought for the White Guard in defense of the ancien régime. While the war involved multiple factions and localized struggles, the central cleavage between Red and White forces posed a stark test of political allegiance.[4]

By 1922, the Bolsheviks had consolidated power—but they inherited a population of organized, armed, and politically aware men whose wartime allegiances were complex and often shifting. Empirical evidence suggests that many veterans ultimately joined the revolutionary cause, helping to topple the imperial order. Some were celebrated for their bravery and commitment to the new socialist state. In the early post-revolutionary years, there was a general feeling of celebration among the veterans who joined the revolution with a hope for a better and brighter future, in which their personal and communal sacrifices would be acknowledged and rewarded.

The collapse of the Russian Empire and the violent birth of the Soviet state produced one of the largest veteran populations in modern history. Nearly the entire male population of military age served in either World War I or the subsequent Civil War. Many died; millions

more returned home as survivors of brutal combat, carrying physical wounds as well as new organizational skills, battlefield experience, and a sharpened political consciousness.

3.2 Soviet Repression

The scale and structure of Soviet repression under Stalin offers a window into how revolutionary regimes, once in power, transform their coercive institutions to manage perceived internal threats. Consolidating authoritarian control required not only the elimination of active opposition, but also the preemption of latent challengers, especially those with military training, revolutionary credentials, or independent bases of authority. As repression expanded from targeted operations to mass purges, veterans of World War I and the Civil War emerged as a particularly vulnerable group: skilled, politically ambiguous, and socially visible. Understanding the logic and evolution of Soviet state violence is essential for explaining why both loyalists and former adversaries were swept into the machinery of repression.

Stalin's terror—from covert arrests to mass deportations—peaked between 1929 and 1953, resulting in the imprisonment, exile, or execution of an estimated 15 million Soviet citizens (Conquest 1997; Khlevniuk 2004).[5] This campaign represents one of the largest episodes of coordinated state-led violence in modern history. In the peak years of the Great Purge, over 800,000 people were executed in a single year on charges of treason. Among the most severe offenses were "counter-revolutionary" crimes, defined under Article 58 of the 1927 RSFSR Penal Code, many of which carried the death penalty.[6]

Stalin's regime used repression as a primary tool to impose order and reshape Soviet society to "get rid of alien and hostile segments of the Soviet population," as the official language put it (Shearer 2014).[7] A typical arrest began with a sudden raid by NKVD officers at night or in the early morning hours. Following a search for incriminating evidence, the victim would be charged with anti-Soviet activity, espionage, or conspiracy. Those deemed most threatening to the regime faced brutal interrogation, isolation, and torture before

being hastily sentenced and exiled to the GULAG camps or executed (Gregory 2009).[8] The GULAG system, a sprawling network of over 475 camps and prisons across the USSR, forced detainees to work in inhumane conditions extracting raw materials for industrial development (Viola 2007). Most died in the forced labor camps before receiving amnesty or rehabilitation.

The first major repression campaign began between 1930 and 1933, tied to Stalin's policies of forced industrialization, agricultural collectivization, and the so-called "dekulakization" of the countryside. The Central Committee's November 1929 decree set quotas for arresting kulaks—wealthy or oppositional peasants deemed enemies of the country.[9] More than half a million people were arrested within two years; over half were convicted, one-third sent to the GULAG, and many others deported or executed (Gregory 2009).[10]

The second major episode, known as the "Yezhovschina," culminated in the purges of 1936–1938. Under the direction of NKVD chief Nikolai Yezhov, Stalin targeted potential rivals within the Communist Party and military.[11] Leon Trotsky, a central figure of the revolution, was assassinated in exile on Stalin's orders. During this period, over 500,000 Soviet citizens were executed and another half-million sent to the GULAG. Among them were thousands of veterans and officers, many arrested for their battlefield experience and military credentials (Murphy 2006).

In the final phase of Stalin's terror (1940–1945), ethnic minorities became primary targets. Over 3.5 million minority citizens were arrested, deported, or executed as suspected collaborators or agents of foreign powers. Stalin's authoritarian rule and his repressive machine reshaped Russian society, transformed the country's economy, and in many ways, defined its political trajectory.

Scholars of Soviet repression note that veterans, especially those with battlefield experience or prior status in imperial or revolutionary forces, were frequently viewed as latent threats, organizationally capable and ideologically unpredictable (Murphy 2006; Gregory 2009; Shearer 2014). The very qualities that had once made them valuable became sources

of regime anxiety. Stalin's purges specifically targeted experienced and competent military officers at higher ranks and veterans whose allegiance might shift or whose popularity rivaled that of party elites (Zakharov and Sonin 2024). This fear of organized military dissent was a defining feature of post-revolutionary authoritarian consolidation, and it animated the state's broader logic of preemptive repression. Even celebrated war heroes, whose loyalty had once been an asset, came to be viewed as liabilities once the revolutionary struggle was over. Their combat training, peer networks, and public prestige made them too autonomous to ignore.

It is important to note a contextual nuance regarding the nature of Stalin's succession. While revolutionary regimes often face incentives to repress veterans with combat experience, the risk may be especially acute when power passes from a revolutionary founder to a successor. In such cases, veterans may carry not only military skills but also political lineage—perceived ties to rival factions within the founding movement. This distinction is critical in the Soviet context, where Stalin, unlike direct revolutionary founders, emerged victorious through fierce intra-party competition after Lenin's death. Veterans loyal to Lenin's revolutionary cohort posed a special threat, not simply as capable dissenters but as ideological threats to Stalin's personal authority. To Stalin, they embodied rival versions of revolutionary legitimacy.

In addition to their skills and visibility, veterans may have also been seen as harboring latent grievances, stemming from forced conscription, battlefield trauma, class-based resentments, or unmet expectations of postwar recognition. These mechanisms are not mutually exclusive. The Soviet regime may have targeted veterans both for their capacity to resist and for their perceived willingness to do so.

4 Data and Measurement

I draw on a combination of original and published archival sources to construct four datasets: (1) administrative records of World War I soldiers; (2) administrative records of WWI veterans who later participated in the Russian Civil War; (3) archival data on individuals arrested for political reasons during Stalin's reign; and (4) the 1897 Imperial Russian Census, which provides pre-war demographic information at the district level. Because some community-level analyses are conducted at the level of 775 imperial districts (*"uezds"*), while others use grid-cell units, I aggregate counts of veterans and arrestees separately for each geographic level.[12]

4.1 World War I Records

The World War I data come from the archival portal "In Memory of the Heroes of the Great War 1914-1918 *(Pamyati Geroev Velikoy Voyni)*" (Pamyati Geroev 2020), created by the Russian Ministry of Defense in collaboration with the Federal Archival Agency and the Russian Historical Society. This database contains individual-level biographical and military service information for soldiers who served in the Imperial Russian Army during the war.

Each soldier's profile draws on multiple archival sources: 6.6 million registration records of frontline losses, 5.6 million records of injured or deceased personnel, 3.4 million entries on prisoners of war, 476 burial registers listing over 8,000 identified and nearly 39,000 unidentified soldiers, and 845,168 award citations. These records are derived from official Tsarist sources—including mobilization lists, battalion rosters, and wartime personnel files—and were compiled contemporaneously during the war.

Among all data sources used in this study, the WWI records are the most systematically preserved and least susceptible to post-war political distortion. Because they were assembled during the conflict itself using standardized criteria, they offer relatively consis-

tent geographic and demographic coverage. While the dataset is comprehensive across most of the empire, its primary limitation is regional: records from the Russian Far East, parts of Siberia, and certain border provinces are comparatively sparse or fragmented. This reflects both the logistical difficulty of mobilizing troops from these remote areas and later disruptions in archival preservation.

For inclusion in the analysis, I restrict the sample to soldiers for whom accurate geocoding was possible, based on residential addresses provided in the archival records. Many addresses could not be matched due to vague or inconsistent formatting, non-standard spelling, or historical changes in administrative boundaries.[13] The final sample includes 42,660 soldiers confirmed as killed in action and 4,196 whose bodies were left on the battlefield. I retain these cases to assess whether repression extended to family members even in instances where the veteran had died in the war.

4.2 Russian Civil War Records

The Russian Civil War data draw on two principal sources: a) records of soldiers in the Workers' and Peasants' Red Army, compiled from multiple archival books, casualty lists, and award orders, and b) records of soldiers in the White Guard, assembled from the digitized "Participants of the White movement in Russia *(Uchastniki Belogo dvijeniya v Rossii)*" archival record-book (Volkov 2016).

The primary source for the first data is an archival record book published in 1926 by the Office of the Creation and Service of Troops of the Main Directorate of the Workers' and Peasants' Red Army (RKKA) (G.U.R.K.K.A. 1926). This source contains biographical details, enlistment records, residential information, and causes of death for over 50,000 soldiers killed during the Civil War. Supplementing this is a register of recipients of two major Soviet honors for wartime valor: "Cavaliers of the Order of the Red Banner" and the "Honorary Revolutionary Weapon Award" given for battlefield performance in the Russian Civil War.

The White Guard database includes soldiers, officers, Cossacks, and volunteers who fought against the Bolsheviks between 1917–1922. It comprises 1.5 million entries collected from diverse sources: official archives, personal memoirs, émigré records, obituaries and announcements in the Russian foreign press, necropolises of Russian cemeteries abroad (both published and unpublished), wartime newspapers, and testimonials from surviving family members. Figure 2 presents the geographic distribution of birthplaces for Civil War veterans.[14]

Each data source carries different limitations. The Red Army data are primarily drawn from a Soviet-era registry that mostly documents combat fatalities. As such, they are particularly well suited for tracing the repression of descendants but offer less coverage of surviving veterans. Yet this limitation reinforces the paper's core finding: repression extended even to the families of fallen Red Army soldiers who, by definition, posed no direct threat to the regime. To invalidate this inference, one would have to assume that surviving but undocumented veterans (and their families) were systematically spared, while families of the deceased were disproportionately punished—a scenario inconsistent with both historical evidence and the regime's known patterns of coercion.

A separate Red Army dataset includes individuals awarded Civil War honors for combat service. This collection is more detailed but likely over-represents decorated survivors. However, this does not bias estimates for Hypothesis 2, which focuses solely on decorations received during World War I. Civil War honors are used only for veteran identification and do not factor into the coding of independent variables. Thus, even if decorated Civil War veterans are overrepresented, the results for Hypothesis 2 remain unaffected, as the variable of interest is strictly limited to pre-revolutionary decorations awarded by the Tsarist regime. If anything, the fact that recognized loyalty increased vulnerability rather than reduced it directly supports the theoretical claims.[15]

4.3 Memorial Records

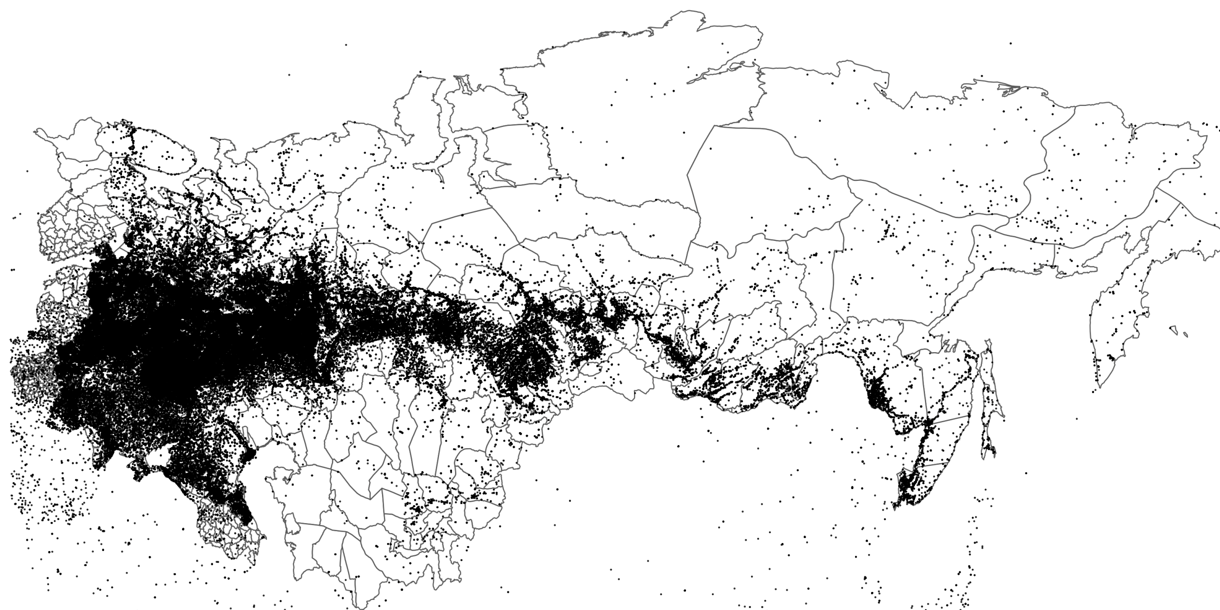
The data on Stalin-era political repression come from the "Victims of Political Terror in the USSR *(Zhertvy Politicheskogo Terrora v SSSR)*" archival portal (Zhukov and Talibova 2018), created and maintained by the Russian human rights organization Memorial since 2001 (Memorial 2014). This database is one of the most comprehensive open-source collections on victims of Stalinist repression. It contains 2.65 million individual-level records of people arrested by the Soviet secret police and convicted of political crimes under Article 58 of the RSFSR Penal Code between 1921 and 1959.

The database was compiled from a wide array of sources: Soviet Interior Ministry documents, 120 regional books of remembrance published after the collapse of the Soviet Union, official records from the Commission for the Rehabilitation of Victims of Political Repression, additional state archives, and materials provided by victims' families. In addition to biographical information, the dataset includes the year of arrest and rehabilitation, nationality, and level of education. It does not include other forms of repression that were widespread in the USSR, such as ethnic deportations, counterinsurgency operations, or famine-related state violence. Figure 1 displays the geographic distribution of birthplaces for individuals arrested under Article 58.[16]

While the Memorial dataset offers the most complete available account of Stalin-era repression, it is shaped by both the bureaucratic logic of Soviet record-keeping and by post-Soviet patterns of archival preservation. Some regions, like those outside the present-day Russian Federation, are underrepresented due to inaccessible, incomplete, or lost records. Others benefited from more systematic compilation and local memory initiatives. These disparities could lead to underestimation of repression in certain peripheral regions. However, they are unlikely to bias comparisons across sub-populations of veterans. In fact, to the extent that missing data reflect repression without documentation, they would attenuate the estimated effects, making it harder to detect statistically significant differences across

groups. This concern with geographic missingness is directly addressed in the alternative explanations section, where I re-estimate all models on a restricted sample excluding districts outside present-day Russian territory.

Figure 1: Geographic distribution of individuals arrested under Article 58, by birth location.

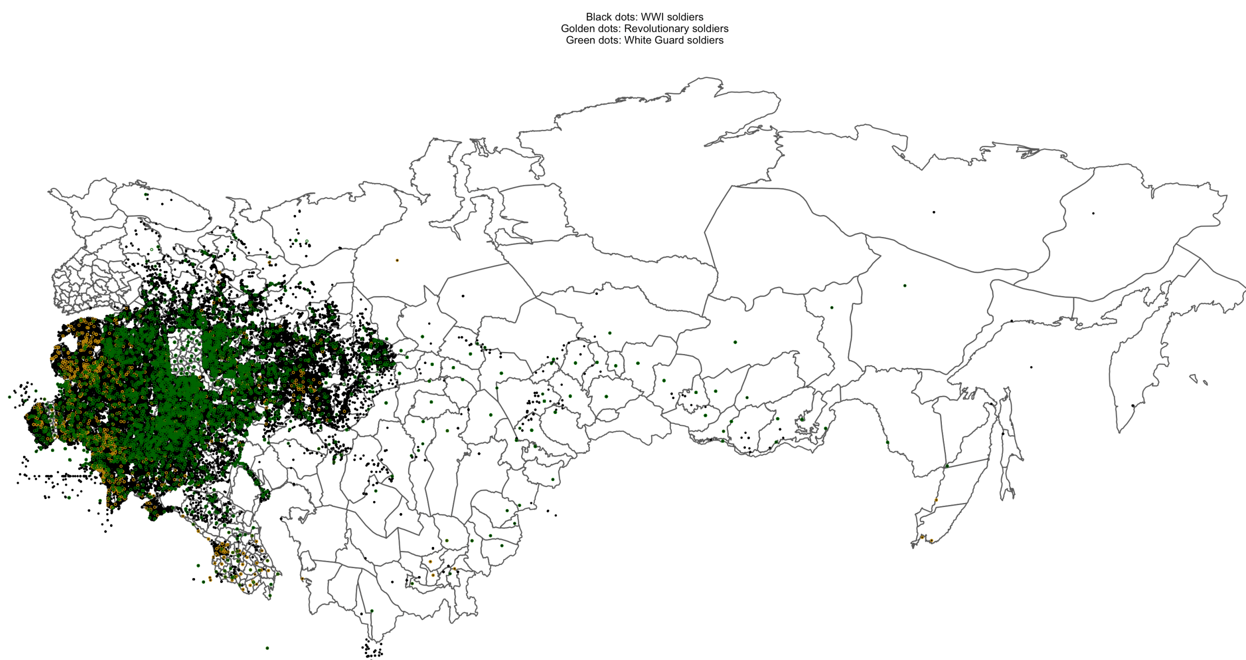


Each point represents the birthplace of one person arrested and convicted of political crimes during the Stalinist period.

4.4 1897 Census Data

For socio-demographic variables, I rely on data from the first and only Russian Imperial Census, conducted in 1897 (Troynitsky 1899). The census provides detailed information for each of the 775 districts, capturing the socio-economic, cultural, and demographic structure of Russian society at the turn of the century.[17] I use several key variables from the census: total population, the share of military-age males, the share of literate males, the proportion of the urban population, and population density.[18] To account for geographic variation, I also

Figure 2: Geographic distribution of veterans from World War I and the Russian Civil War, by birth location.



Each point marks the birthplace of a WWI veteran. Black dots indicate veterans who did not join the Civil War; gold, those who fought for the Red Army; green, those who joined the White Guard.

include district altitude based on the coordinates of the administrative center. In individual-level analyses, I additionally control for ethnicity using a binary variable indicating whether a soldier was ethnically Russian or a member of a minority group.

4.5 Maps

Imperial district boundaries are derived from a historical map of pre-war administrative divisions (Kessler 2017). However, the boundaries of Russian imperial districts (especially at lower administrative levels) do not align cleanly with Soviet-era borders. After World War I, the Soviet authorities revised administrative divisions to accommodate the loss of western territories and to reorganize internal governance. Moreover, many lower-level boundaries had already changed significantly between 1897 and 1914, prior to the revolution. To address these inconsistencies, I performed a series of spatial adjustments, referencing historical atlases of the Russian Empire and the Soviet Union, as well as archival records documenting territorial and administrative changes over time.

4.6 Descriptives

Table 1 presents summary statistics for the main variables included in the district-level analysis. On average, 2,803 individuals were arrested per district. During World War I and the Russian Civil War, the average district contained 2,608 WWI veterans, 62 WWI medal recipients, 9 WWI veterans who joined the revolutionary movement, and 31 who joined the counter-revolutionary movement.

Table 2 reports summary statistics for variables used in the grid-cell-level analysis. The average grid contains 732 arrestees, 861 WWI veterans, 6 revolutionaries, and 15 counter-revolutionaries.

The first panel of Table 3 summarizes individual-level family matches across the WWI

Table 1: Summary statistics (Districts)

Name	*Median*	*Mean*	*SD*	*Range*	*N*
Outcome variable					
Repression	1172.00	2803.87	5334.61	[1, 66257]	747
Explanatory variables					
WWI Veterans	2327.00	2608.52	2325.42	[1, 22056]	766
WWI heroes	36.00	61.99	79.59	[1, 607]	664
Revolutionaries	4.00	8.54	13.81	[1, 155]	617
Counter-revolutionaries	24.00	31.14	28.51	[1, 212]	627
Covariates					
Share of Military-Age Male	0.65	0.64	0.04	[0.36, 0.85]	761
Share of Literate Male	0.25	0.26	0.14	[0.01, 0.9]	761
Share of Urban Population	0.06	0.11	0.13	[0.01, 0.96]	759
Density	32.00	36.42	44.41	[0.02, 667.7]	761
Elevation	137.50	196.62	251.73	[-31, 1999]	762

Table 2: Summary statistics (Grid-cells)

Name	*Median*	*Mean*	*SD*	*Range*	*N*
Outcome variable					
Repression	275.50	731.97	1898.33	[1, 49953]	2,214
Explanatory variables					
WWI Veterans	141.00	861.49	1831.22	[1, 46550]	2,315
WWI heroes	7.00	27.45	54.19	[1, 863]	1,498
Revolutionaries	2.00	6.13	11.80	[1, 131]	856
Counter-revolutionaries	5.00	14.86	23.55	[1, 408]	1,313
Covariates					
Share of Military-Age Male	0.65	0.64	0.03	[0.36, 0.85]	2,314
Share of Literate Male	0.25	0.27	0.12	[0.01, 0.81]	2,314
Share of Urban Population	0.05	0.09	0.10	[0.01, 0.95]	2,313
Density	19.38	23.57	22.03	[0.03, 442.1]	2,315
Elevation	117.00	147.23	177.77	[-31, 1999]	2,315

and repression data. Column 1 reports raw match counts; Column 2 indicates the group size. For example, 16,798 indicates that out of 41,125 WWI soldiers who were awarded medals, 16,798 had no recorded family member arrested during Stalin's purges. Column 3 shows the proportion of veterans with an identified family arrest per group type, while Column 4 reports that group's share among all Stalin-era arrests.

The second panel of Table 3 summarizes the total number of familial links between WWI veterans and repression victims. These links exceed the total number of arrestees, since multiple veterans may share familial ties to the same arrestee. Column 3 reports the average number of connections per veteran; Column 4 shows the maximum number of connections for any individual in each category. Notably, WWI awardees represent a cross-cutting group, as both revolutionaries and counter-revolutionaries could receive medals.

A central analytical challenge stems from the temporal overlap between World War I (1914–1918) and the Russian Civil War (1918–1922). Many individuals fought in both, complicating efforts to isolate the effects of service in each conflict. Appendix **??** explicitly outlines all possible combinations of wartime participation across the two conflicts. Appendix **??** also details the data construction process, including how archival materials were digitized, structured, and validated.

Missing data pose challenges across all sources, driven by variation in historical record-keeping and archival preservation. Official datasets are generally more complete, while coverage varies in others. Urban and western regions are better documented than rural or peripheral areas, such as the Russian Far East and territories outside the present-day Russian Federation. This spatial pattern of missingness could attenuate estimated effects if under-reported areas systematically obscure records of service or repression. However, it is unlikely to bias comparisons across veteran subgroups, which are conducted within spatially consistent units. To address these concerns, the analysis includes unit-level fixed effects, limits the main sample to areas with higher data completeness, and presents robustness checks

Table 3: Individual Matched Data Statistics

Groups	Count	Group Size	% of group	% of Arrested
No victim match				
WWI veteran	1,644,277	1,994,352	82.45	71.82
WWI heroes	16,798	41,125	40.85	0.73
Revolutionaries	4,597	5,247	87.61	0.20
White Guard	11,323	19,511	58.03	0.49
Only one victim				
WWI veteran	107,566	1,994,352	5.39	4.70
WWI heroes	2,542	41,125	6.18	0.11
Revolutionaries	200	5,247	3.81	0.01
White Guard	1,619	19,511	8.30	0.07
At least one victim				
WWI veteran	350,075	1,994,352	17.55	15.29
WWI heroes	24,327	41,125	59.15	1.06
Revolutionaries	650	5,247	12.39	0.03
White Guard	8,188	19,511	41.97	0.36
Multiple victims				
WWI veteran	242,509	1,994,352	12.16	10.60
WWI heroes	21,785	41,125	52.97	0.95
Revolutionaries	450	5,247	8.58	0.02
White Guard	6,569	19,511	33.67	0.29

Groups	Count	Group Size	Mean per person	Max per person
Overall connections				
WWI veteran	2,923,904	1,994,352	1.47	554
WWI heroes	595,071	41,125	14.47	554
Revolutionaries	5,737	5,247	1.09	256
White Guard	99,590	19,511	5.10	554

that exclude districts outside the present-day Russian Federation.

5 Estimation Strategy

I utilize three levels of analysis to estimate the relationship between military service and individual and communal repression: the district level, the grid-cell level, and the individual level.

5.1 Community-Level Analysis

I begin by examining the relationship between wartime participation and postwar repression by looking at the aggregate, district-level measures and controlling for district-level population and socioeconomic characteristics. Specifically, I estimate the following model for the number of arrestees in each district:

$$ln(\text{Repression}_{p[d]}) = \gamma \cdot ln(\text{Veteran}_{p[d]}) + \boldsymbol{\beta}'\boldsymbol{X}_{p[d]} + s\big(\text{lon}_{d[i]}, \text{lat}_{d[i]}\big) + \xi_{p[d]} + \varepsilon_{p[d]}. \quad (1)$$

where $ln(\text{Repression}_{p[d]})$ is the natural logarithm of the number of individuals arrested and resettled from district d within historical province p, and $ln(\text{Veteran}_{d[i]})$ represents represents alternative district-level measures of veteran presence: the number of WWI veterans overall, the number of decorated WWI veterans, the number of WWI veterans who later joined the counter-revolutionary White Guard, and those who joined the revolutionary Red Army.

I use 1897 Census data aggregated across imperial districts, controlling for a vector of district-level characteristics that may affect the likelihood of being arrested, including the size of the male population, male literacy rates, urbanization rates, ethnic Russian population share, and population density. Province fixed effects account for unobserved regional heterogeneity. Standard errors are clustered at the district level, and I include two-dimensional

spatial splines for birth locations to flexibly account for geographic confounding.

One challenge of this analysis stems from changes in administrative boundaries over time. District borders in the Russian Empire did not align with those in the Soviet Union, and many underwent significant jurisdictional, territorial, and naming changes over time, even within the Russian Empire, and subsequently, within the Soviet Union. To address these inconsistencies, I construct synthetic geographic units using a regular 15×15 km grid network. I overlay these grid-cells on historical maps of both Imperial Russia and the Soviet Union and extract relevant quantities of interest for each cell.

The grid-based approach offers several advantages: it is independent of political-administrative boundaries, temporally and spatially fixed, and exogenous to the outcome of interest. This design provides a consistent spatial unit for analyzing how localized concentrations of veterans relate to patterns of repression, mitigating the confounding effects of shifting district definitions.

Similar to the district-level aggregation, I calculate the total number of veterans and arrestees in each grid-cell. I use the following OLS specification:

$$ln(\text{Repression}_j) = \gamma \cdot ln(\text{Veteran}_j) + \boldsymbol{\beta}'\boldsymbol{X}_j + s\big(\text{lon}_{d[i]}, \text{lat}_{d[i]}\big) + \xi_j + \varepsilon_j. \qquad (2)$$

where $ln(\text{Repression}_j)$ denotes the natural logarithm of the number of individuals arrested and resettled in grid-cell, and $ln(\text{Veteran}_j)$ measures the number of WWI and Civil War veterans in the same cell. I include grid-level covariates and fixed effects, and cluster standard errors at the grid-cell level.

5.2 Individual Analysis

Linking individual-level outcomes with district- or grid-level patterns raises challenges of ecological inference: individuals arrested from a given district or grid-cell may not themselves

be veterans or immediate family members. For example, World War I conscription initially drew heavily from regions with strong state presence. If these same areas later experienced higher rates of arrest due to continued state access, then aggregate regressions could produce biased results, overstating the relationship between veteran density and repression, even if veterans themselves were not disproportionately targeted.

To address this problem, I analyze repression at the individual level by directly matching veterans to arrest records. Specifically, I link World War I and Civil War veteran data with the Memorial database using last names and grid-cell of birth as matching fields.[19] Since both datasets contain biographical information, I can examine whether individuals sharing the same last name as a veteran and born in the same location were arrested during Stalin-era repression. For each veteran, I calculate (1) a binary indicator for whether at least one person sharing their last name was arrested in the same geographic unit, and (2) a count of such arrests in the vicinity of birthplace, which is log-transformed to account for skewness.

To estimate the effect of veteran status on the likelihood of familial repression, I estimate two separate least squares models:

$$\text{Repression}_i = \gamma \cdot \text{Veteran}_i + \boldsymbol{\beta}' \boldsymbol{X}_i + s\big(\text{lon}_{d[i]}, \text{lat}_{d[i]}\big) + \xi_j + \varepsilon_j. \tag{3}$$

$$ln(\text{Repression}_{j[i]}) = \gamma \cdot \text{Veteran}_i + \boldsymbol{\beta}' \boldsymbol{X}_i + s\big(\text{lon}_{d[i]}, \text{lat}_{d[i]}\big) + \xi_j + \varepsilon_j. \tag{4}$$

In equation 3, Repression_i is a binary outcome indicating whether at least one family member of veteran i was arrested. In the second model, the dependent variable captures the total number of arrests of individuals with the same last name within the veteran's birth grid-cell, thus reflecting the intensity of familial exposure to repression. Both models include veteran-level controls such as ethnicity, and standard errors are clustered at the grid-cell level.

Because the full dataset includes all World War I draftees, individual-level analyses focus on the subset of veterans who (a) received battlefield distinctions or (b) later participated in the Russian Civil War. Appendix **??** presents an additional robustness check that employs a more precise matching strategy based on patronymics. In this approach, the veteran's first name is used to generate a patronymic match with the arrestee, allowing the identification of direct offspring. This method reduces false positives from common last names, but it is limited to identifying children of veterans—excluding spouses, siblings, and grandchildren—thereby increasing the risk of false negatives.

Table 4 summarizes the study's core hypotheses, the relevant target populations, units of analysis, and the associated outcome variables.

Table 4: Table Mapping Hypotheses to Measured Outcomes

	Core Claim	**Population of Interest**	**Unit(s) of Analysis**	**Main Outcome**
H1	Combat veterans are more likely to be repressed than non-veterans	All WWI veterans	District level, Grid-cell level	Number of veterans repressed
H2	Among veterans, those who received state decorations are more likely to be repressed	All decorated WWI veterans	District level, Grid-cell level, Individual level	Number of veterans + family members repressed & Family repression indicator
H3	Revolutionary regimes will treat loyalist veterans and their families preferentially	All WWI veterans who participated in the civil war	District level, Grid-cell level, Individual level	Number of veterans repressed + family members & Family repression indicator
H4	Even veterans loyal to the revolutionary cause may be repressed	All WWI veterans who joined the Red Army in the civil war	District level, Grid-cell level, Individual level	Number of veterans + family members repressed & Family repression indicator

6 Results

The results provide strong evidence that military service, regardless of which side veterans fought for, was associated with higher risk of repression under Stalin's post-revolutionary regime. This pattern is robust across all three units of analysis, underscoring the intensity of both community-level and individual-level exposure to state violence.

Table 5 presents estimates from the district-level analysis. An increase in the number of World War I veterans from zero to 10 in a given district is associated with a 1.10 percentage point increase in the number of arrests. A similar increase in the number of decorated WWI veterans leads to a 1.18 percentage point rise.[20] For Civil War veterans, the effects differ slightly by side: Red Army veterans are associated with a 0.86 percentage point increase in arrests, while White Guard veterans correspond to a 1.23 percentage point increase.

Table 5: District-Level Results

	Dependent variable:			
	Log of Arrested Individuals			
	(1)	(2)	(3)	(4)
WWI veterans (general)	0.460***			
	(0.062)			
Awarded WWI veterans		0.492***		
		(0.079)		
Red Army veterans			0.358***	
			(0.092)	
White Guard veterans				0.512***
				(0.084)
District Controls	✓	✓	✓	✓
Province Fixed effects	✓	✓	✓	✓
Observations	742	653	606	620
Adjusted R^2	0.806	0.779	0.791	0.734

Note: Robust standard errors, clustered by province, are reported in parentheses. All models include province fixed effects and district-level covariates. Significance levels: $^{\dagger}p < 0.1$; *p < .05; **p < .01; ***p < .001.

Table 6 presents results using grid-cells defined by soldiers' birthplaces. Coefficients are consistently positive and statistically significant. A change from zero to 10 in the number of

WWI veterans, WWI heroes, Red Army veterans, and White Guard veterans in a grid-cell increases the number of arrestees by 0.84, 0.89, 1.63, and 0.96 percentage points, respectively.

Table 6: Grid-cell-Level Results

	Dependent variable:			
	Log of Arrested Individuals			
	(1)	(2)	(3)	(4)
WWI veterans (general)	0.349***			
	(0.055)			
Awarded WWI veterans		0.370***		
		(0.062)		
Red Army veterans			0.678***	
			(0.088)	
White Guard veterans				0.402***
				(0.073)
Grid-cell Controls	✓	✓	✓	✓
District Fixed Effects	✓	✓	✓	✓
Cubic Spatial Splines	✓	✓	✓	✓
Observations	1,987,701	1,946,053	1,699,214	1,909,513
Grid-cells with complete data	2214	1482	838	1302
Adjusted R^2	0.762	0.764	0.813	0.761

Note: Robust standard errors, clustered by district, are reported in parentheses. Included observations reflect districts. All models include province fixed effects and district-level covariates. Significance levels: $^{\dagger}p < 0.1$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$.

I present results from equation 3 in the first panel of Table 7. The estimates show that both WWI hero status and Civil War participation—regardless of side—are strongly associated with the likelihood that at least one family member was later arrested. Specifically, being a Red Army veteran is associated with a 14.4 percentage point increase, while being a White Guard veteran corresponds to a 71.1 percentage point increase in the probability that at least one family member or descendant was repressed, relative to non-veterans. These are substantial effects, suggesting that both revolutionary and counter-revolutionary wartime service exposed families to long-term suspicion and collective punishment under the Soviet regime.

The second panel of Table 7 shows the results from equation 4, focusing on the inten-

sity of repression among family members. Here, Red Army veterans are linked to a 3.56 percent increase, and White Guard veterans to a 32.8 percent increase in the number of family members repressed. These are large effects—especially for counter-revolutionaries—and underscore the vulnerability of veterans' families to collective punishment.

Table 7: Individual-Level Results

	Dependent variable:		
	Binary Family Repression Indicator		
	(1)	(2)	(3)
Awarded WWI veterans	1.390***		
	(0.012)		
Red Army veterans		0.144***	
		(0.048)	
White Guard veterans			0.711***
			(0.016)
Individual Controls	✓	✓	✓
District Fixed effects	✓	✓	✓
Cubic Spatial Splines	✓	✓	✓
Observations	1,602,186	1,602,186	1,602,186
Adjusted R^2	0.191	0.182	0.183
	Number of Repressed Family Members		
	(1)	(2)	(3)
Awarded WWI veterans	0.736***		
	(0.036)		
Red Army veterans		0.035***	
		(0.010)	
White Guard veterans			0.284***
			(0.015)
Individual Controls	✓	✓	✓
District Fixed effects	✓	✓	✓
Cubic Spatial Splines	✓	✓	✓
Observations	1,601,593	1,601,593	1,601,593
Adjusted R^2	0.307	0.285	0.287

Note: Robust standard errors, clustered by grid-cell, are reported in parentheses. Included observations reflect disaggregated individual records, with non-missing location. All models include district fixed effects, cubic spatial splines, and individual birth and grid-cell-level covariates. Significance levels: $^{\dagger}p < 0.1$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$.

It is important to note that significant emigration—both voluntary and forced—reduced the number of White Guard veterans who remained within Soviet borders. Between 1917

and 1920, many rank-and-file soldiers, officers, intellectuals, and anti-Bolshevik elites fled the country. This exodus likely constrained the pool of available targets from the White faction, which could have attenuated observed repression rates. The systematic targeting of the remaining White veterans highlights the regime's broader logic of preemptive control. If anything, these estimates represent conservative lower bounds: the presence of more counter-revolutionary veterans would likely have amplified the intensity of repression.

Soviet authorities treated veterans of the civil war as potential threats, regardless of which side they had fought on. While the individual-level analysis focuses on the repression of family members, this is consistent with Soviet-era practices of collective punishment and guilt by association. The persecution of relatives offers insight into the regime's perception of threat: veterans were not only dangerous themselves, but also cast suspicion on their kin.

These findings align with all three mechanisms theorized earlier: threat perception, loyalty ambiguity, and bureaucratic visibility. First, the results consistently show higher repression rates among WWI heroes—veterans who were decorated or officially recognized for battlefield valor. These individuals likely appeared most threatening to the regime. Their combat skills, tactical knowledge, and social standing made them both capable and well-connected. That the state targeted decorated veterans even more aggressively than regular ones suggests that it feared not just any soldier, but those most capable of resisting repression or organizing dissent. In the eyes of a paranoid regime, honor on the battlefield translated into political risk.

Second, the fact that Red Army veterans, who ostensibly fought for the Bolshevik cause and helped bring the regime to power, were nonetheless subject to repression at meaningful rates points to the salience of loyalty ambiguity. In a revolutionary autocracy like the Soviet Union, even prior service on behalf of the regime did not guarantee future trust. Veterans of the Red Army may have been ideologically heterogeneous, conscripted rather than fully committed, or simply too experienced to be easily controlled. Their very willingness to pick

up arms in one revolution may have made them seem all the more capable of doing so again. The regime, in this sense, treated loyalty as provisional and contingent, especially when it was born in a context of civil war and regime change.

Third, the patterns are also consistent with a bureaucratic visibility mechanism. The veterans most easily traceable in official records (those with formal recognition, medals, or state honors) were also more likely to be repressed. While this may reflect threat perceptions or symbolic politics, it also points to the practical mechanics of authoritarian repression: regimes often rely on the information they already have. In this view, veterans become legible to the state's coercive apparatus: those whose names were known, whose files existed, and whose addresses were logged could be located, monitored, and punished more readily. Thus, the machinery of repression may have functioned not just ideologically, but also administratively.

Taken together, these findings suggest that repression was not random, nor was it based on a single dimension of risk. The Soviet regime targeted veterans who were skilled, visible, and potentially disloyal—not just those who fought against it, but also those who fought for it. This multifaceted logic of repression, born out of revolutionary insecurity and enabled by bureaucratic reach, helps explain the durability and intensity of repression decades after the wars ended.

7 Alternative Explanations

The empirical findings confirm my key expectations concerning the relationship between veteran status and exposure to repression. In this section, I assess the robustness of these results by considering several alternative explanations.

7.1 Politically Neutral Veterans

I begin by reassessing the effect of participation in World War I. The main analysis distinguishes among three groups: all WWI veterans, those who later supported the Bolsheviks, and those who fought to defend the old regime. A fourth group—WWI veterans who remained politically unaligned during the Russian Civil War—is excluded from the main specifications but offers an important comparative baseline.

While perhaps unlikely, one possibility is that the Soviet regime punished all Civil War participants, irrespective of side, due to uncertainty over individual loyalties, while sparing those who remained neutral after 1917. If true, we would expect a null or negative effect of WWI service among veterans who abstained from further military or political engagement.

To evaluate this possibility, I classify WWI veterans with no corresponding Civil War records as politically neutral and re-estimate the core models using their wartime service as the key explanatory variable. As shown in Table 8, the effect of WWI service for politically neutral veterans remains positive, but is notably smaller in magnitude at the district level. This pattern suggests that while basic military training increased long-term risk of repression, participation in the Civil War—and thus clearer political alignment—was a more salient determinant of the state's repressive calculus.

7.2 All Red Army Revolutionaries

The main analysis includes only Civil War participants who also served in World War I. This choice reflects both data availability and the relative reliability of WWI records. While the Civil War datasets are sizable, they do not comprehensively capture the full population of fighters. This restriction raises a potential concern: if Soviet authorities possessed more complete information about WWI veterans than about Civil War participants, the observed effects for Red Army soldiers might partly reflect their earlier imperial service, rather than

Table 8: Neutral veterans and Soviet Repression

	Units of Analysis	
	District Level	Grid-cell Level
Neutral WWI veterans	0.0002 (0.0001)***	0.349 (0.055)***
Districts	742	
Grid-cells		2315
Observations	742	1,987,699
Adjusted R^2	0.80	0.762
Fixed effects	✓	✓
Cubic splines	✓	✓

Clustered robust standard errors are reported in parentheses. The dependent variable represents the number of WWI veterans who remained neutral during the civil war, specified by geographic aggregation levels. All models include district fixed effects, cubic spatial splines, and covariates. Significance levels: $^{\dagger}p < 0.1$; *p < .05; **p < .01; ***p < .001

their revolutionary alignment.

To address this, I re-estimate the core models using the full sample of Revolutionary Red Guard soldiers, regardless of whether they served in World War I. This group consists exclusively of individuals who died in combat fighting for the Bolshevik cause. As shown in Table 9, the results remain robust. Revolutionary service in the absence of WWI participation was still associated with a higher likelihood of repression. This suggests that the effect is not driven by WWI visibility alone, but by participation in the revolutionary war effort itself.

7.3 The Ethnicity Factor

One potential confounder in the observed patterns is ethnicity. Ethnic minority veterans of World War I enlisted in the Russian Civil War at disproportionately high rates (Talibova 2022), and many of the war's fiercest battles unfolded in minority-dominated regions where nationalist movements sought independence and the creation of new states. It is also well established that Stalin's final wave of purges disproportionately targeted ethnic minority areas. While the individual-level models control for ethnicity, spatial clustering of ethnic

Table 9: Revolutionaries Irrespective of WWI status

	Specifications	
	District Aggregates	Weighted by Population
All revolutionaries	0.503 (0.056)***	22.604 (8.677)***
Observations	629	629
Adjusted R^2	0.772	0.479
District Controls	✓	✓
Province Fixed effects	✓	✓

Clustered robust standard errors are reported in parentheses. The dependent variable represents all revolutionary soldiers of the Russian Civil War, irrespective of their participation in WWI. The second column weights measures by the population size. All models include province fixed effects and district covariates. Significance levels: $^{\dagger}p < 0.1$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$

minorities may still bias the district- and grid-level estimates by simultaneously increasing the likelihood of both Civil War participation and state repression.

To address this concern, I re-estimate all models using a geographically restricted sample that excludes districts outside the borders of present-day Russia. This removes the predominantly minority regions that later became independent Soviet republics and post-Soviet states. Appendix **??** lists the excluded districts and reports the results. The core findings remain robust: wartime enlistment continues to be positively associated with repression, even when the most ethnically distinct regions are excluded from the analysis.

8 Scope Conditions and Generalizability

This study examines how military service and veteran status shaped vulnerability to state repression in a revolutionary authoritarian regime: Stalin's Soviet Union. This scope condition is critical. Revolutionary regimes are distinct from other autocracies in that they emerge through mass mobilization and violent contestation, leaving behind a large pool of militarized citizens whose organizational skills and symbolic capital may be viewed as future

threats. These regimes are often deeply insecure, suspicious of autonomous power centers, and prone to wide-ranging repression to consolidate control. As such, the findings are most applicable to revolutionary autocracies with the bureaucratic capacity to monitor, record, and retrospectively punish perceived threats.

The theoretical logic is not meant to apply to all political systems or all forms of authoritarianism. Stable autocracies without revolutionary origins or democracies with institutionalized protections for veterans are likely to produce different patterns of postwar treatment due to different incentive structures and security considerations. Even within autocracies, the nature of the ruling coalition matters. The theory is particularly relevant to civilian-led revolutionary regimes where formally organized veterans of conventional military units fought for revolutionary causes, rather than juntas or military dictatorships, where the military is part of the ruling coalition and veterans are less likely to be treated as threats. Likewise, the basis of authoritarian legitimacy, whether personalist, ideological, party-based, or dynastic, can influence whether military experience is seen as an asset or a liability. In dynastic autocracies, for example, the emphasis may be on loyalty through kinship or patronage rather than battlefield service. These differences merit future study, but fall outside the present theory's core scope.

Revolutionary autocracies are also more likely to rely on extrinsic forms of mobilization. While soldiers across regime types may enlist for both intrinsic and extrinsic reasons, regimes born of revolution often amplify extrinsic motivations, such as coercion, opportunism, or material incentives, through fluid ideological narratives and instrumentalized reward structures. Loyalty is rarely valued as a virtue in itself; it is evaluated for its future threat potential. Soldiers may be coerced to serve or may join as a survival strategy, with little expectation of reciprocity. Although intrinsic motivations remain part of the story, their relative salience is likely diminished in such contexts.

The temporal relevance of veteran status depends on the regime's level of consolidation

and the durability of bureaucratic memory. In cases like Stalin's USSR, where the regime retained extensive wartime records and remained fixated on internal dissent, veteran status remained politically salient for decades. Veterans were not just remembered; they were monitored. This dynamic may persist until generational turnover obscures past affiliations or the regime no longer sees its founding moment as politically dangerous.

Accordingly, the theory advanced here is most applicable to revolutionary or post-revolutionary authoritarian regimes with a persistent fear of organized dissent and information-rich bureaucratic structures capable of surveillance and retrospective punishment. The Soviet Union under Stalin represents a paradigmatic case, but the core insights may travel to other contexts, including Maoist China, post-independence Algeria, or Iran after 1979, where revolutionary elites confronted similar dilemmas of post-war consolidation and fear of militarized dissent. In Maoist China, veterans of the revolutionary struggle were later purged or sidelined during intra-party purges. In post-independence Algeria, ex-fighters were initially celebrated but later repressed when they posed political competition to the ruling FLN (Martinez 2000). In post-revolutionary Iran, veterans of the Iran-Iraq War, especially those aligned with rival political currents, have faced periodic repression. These examples suggest a recurring tension in revolutionary autocracies: the militarized masses that bring the regime to power often become the very groups it seeks to neutralize.

9 Conclusion

Using newly digitized data on soldiers of World War I and the Russian Civil War, combined with archival records of political arrests under Stalin, this paper examines how wartime service, both at the individual and community level, shaped exposure to repression in a post-revolutionary authoritarian regime. Focusing on a non-material but critical outcome—the treatment of veterans by the state—I find that military sacrifice and loyalty did not translate into long-term protection. In fact, wartime participation, including for those who fought on

behalf of the Bolshevik cause, increased the risk of future persecution.

Reversing the usual direction of inquiry in the political violence literature, which often treats repression as a cause of future loyalty, I show that loyalty itself can become a source of vulnerability. The legacies of wartime service persisted long after the battles ended, affecting not just veterans but their families and communities. Once the regime had consolidated power, it turned against even those who helped build it, managing rather than rewarding its former allies.

These findings carry important implications for the study of state-military-society relations in autocracies. As long as a revolutionary regime relies on mass mobilization for its survival, either to fight external wars or internal enemies, it may tolerate or even valorize those who serve. But once secure, the regime often treats these same individuals as threats. The repression of loyal veterans reveals a key mechanism of authoritarian consolidation: the elimination of autonomous power centers, even when those centers were forged in service to the regime.

This study advances three bodies of research. First, it contributes to the political violence literature by shedding light on how autocracies select their targets. Second, it extends scholarship on military service by examining outcomes beyond labor market returns or human capital accumulation—namely, personal and familial security. Third, it enriches our understanding of revolutions and state formation by revealing how post-revolutionary regimes often repress the very actors who facilitated their rise.

While based on a single, albeit paradigmatic case, the findings raise broader questions about the long-term treatment of veterans in different regime types. To which extent do democratic governments uphold their end of the liberal social contract for those who serve? Historical evidence suggests that even democratic regimes have struggled to provide equitable treatment to all veterans. For example, Black American veterans returning from WWII were often denied the protections and opportunities afforded to their white counterparts (Onkst

1998; Turner and Bound 2003; Parker 2009; Ang and Chinoy 2025), despite expectations of greater postwar inclusion (Stouffer et al. 1949). Yet the mechanism differs: in democracies, exclusion is typically rooted in structural inequality and uneven implementation of rights, not regime survival fears. In revolutionary autocracies, by contrast, repression stems from fear of organized dissent and regime insecurity. Where democracies fail through neglect, revolutionary regimes repress by design.

Future research should explore whether similar dynamics apply to veterans of other revolutions, civil wars, or regime transitions, and whether postwar repression systematically differs between revolutionary and non-revolutionary authoritarian regimes, or between authoritarian regimes and democracies. The legacies of war, it seems, do not end on the battlefield, but echo across generations, shaped by the state's shifting perception of loyalty and threat.

Notes

[1]This number does not include half a million missing soldiers.

[2]After mobilization, the numbers grew to 4.5 million with double the original size of the officer corps (Stone 2021).

[3]There were additional notable factions, such as the Green Army – local militias, comprised of politically neutral armed peasants who opposed and fought against all other factions between 1917-1922.

[4]The Russian Civil War was historically complex and involved numerous factions beyond the simplified 'Red' versus 'White' dichotomy commonly used for analytical clarity. Notable alternative groups included Ukrainian anarchists of the Makhnovshchina and Left Socialist-Revolutionaries, the peasant-led and non-ideological 'Green' insurgencies, and the armed factions in the Northern Caucasus. Although my empirical analysis specifically examines the treatment of veterans identified clearly as 'Red,' it is important to acknowledge that the broader historical reality involved diverse loyalties, shifting alliances, and substantial regional heterogeneity.

[5]The most conservative estimates of the overall death toll of Stalin's repressions indicate figures as high as 20-30 million people (Dyadkin 1983). This figure excludes around 1 million executions.

[6]These included treason, terrorism, espionage, insurrection, anti-Soviet propaganda and agitation, and working for a foreign state.

[7]Victims were dubbed with a specific term – *"chuzhdye elementy"*, which in translation meant alien elements of society.

[8]GULAG is an acronym for *"Glavnoe Upravlenie Ispravitelno-Trudovykh Lagerei" – the Main Adminis-*

tration of Corrective-Labor Camps officially founded in 1930.

[9]First category included the most active kulaks, engaged in counter-revolutionary activities, who were estimated at around 60,000 heads of household. Despite the original estimations, more than 280,000 kulaks were arrested under this category. The second category was defined as wealthy but less active kulaks and included 154,000 families (more than half a million people).

[10]The campaign also aimed to populate remote, resource-rich territories in Siberia and Central Asia as part of the first Five-Year Plan.

[11]This episode was named after Nikolay Yezhov, Chief of the Soviet secret police and supervisor of the most brutal stage of great purges, who later himself became a victim of the purges and was executed in 1940.

[12]In the territorial-administrative division of the Russian Empire before the start of WWI, districts were the second tier of administrative division. Overall, there were 101 unique provinces (*gubernia or oblast*), 824 unique districts including the Grand Dutchy of Finland (*uezd*), and thousands of localities (*volost*) and villages (*derevnya or selo*).

[13]297,925 records have missing birth location field.

[14]Although figures and maps present raw counts of veterans or repression cases, all regression models include covariates that adjust for underlying population size, density, and other key demographic factors.

[15]By contrast, the White Guard data were compiled from non-state and archival sources and are less susceptible to regime-driven selection bias. Nonetheless, they are still subject to the typical limitations of conflict-zone record-keeping, such as geographic gaps and uneven preservation across regions.

[16]Vicinity to the train stations affected levels of repression in certain areas, as the transportation department of the secret police was the main source of support for deportations (Kotkin 2017).

[17]In the official imperial census publications, the district is the lowest administrative unit for which information is available.

[18]Originally, density was measured in historical Russian units (*in square versts*). I convert historical units into square kilometers.

[19]Historical data collection in the context of the Russian Empire and the early Soviet period introduces certain limitations that could affect individual-level analyses. First, a common historical practice was assigning identical surnames to large family groups, potentially producing false-positive family connections. Second, data gathered during wartime, particularly civil conflicts, is inevitably subject to archival gaps or missingness due to damaged or destroyed records. Third, extensive use of nicknames or pseudonyms was widespread among revolutionaries, Red Army members. I address these concerns in the Alternative Explanations section.

[20]Given the logarithmic transformation, we subtract $\ln(0+1)$ from $\ln(10+1)$ and multiply by the coefficient size.

References

Ager, P., Bursztyn, L., Leucht, L., and Voth, H.-J. (2021). Killer incentives: Rivalry, performance and risk-taking among german fighter pilots, 1939–45. *The Review of Economic Studies*.

Alesina, A. and Ferrara, E. (2005). Ethnic diversity and economic performance. *Journal of Economic Literature*, 43(3):762–800.

Alesina, A., Reich, B., and Riboni, A. (2020). Nation-building, nationalism, and wars. *Journal of Economic Growth*, 25(4):381–430.

Ang, D. and Chinoy, S. (2025). Vanguard: Black veterans and civil rights after world war i. Technical report, National Bureau of Economic Research.

Angrist, J. and Krueger, A. B. (1994). Why do world war ii veterans earn more than nonveterans? *Journal of labor economics*, 12(1):74–97.

Angrist, J. D., Chen, S. H., and Song, J. (2011). Long-term consequences of vietnam-era conscription: New estimates using social security data. *American Economic Review*, 101(3):334–38.

Arjona, A. (2016). *Rebelocracy*. Cambridge University Press.

Avrahami, Y. and Lerner, M. (2003). The effect of combat service and military rank on entrepreneurial careers: The case of israeli mba graduates. *Journal of Political and Military Sociology*, 31(1):97–118.

Balcells, L. (2012). The consequences of victimization on political identities: Evidence from Spain. *Politics & Society*, 40(3):311–347.

Bedard, K. and Deschênes, O. (2006). The long-term impact of military service on health: Evidence from world war ii and korean war veterans. *American Economic Review*, 96(1):176–194.

Berger, M. C. and Hirsch, B. T. (1983). The civilian earnings experience of vietnam-era veterans. *Journal of Human resources*, pages 455–479.

Besley, T. and Persson, T. (2008). Wars and state capacity. *Journal of the European Economic Association*, 6(2-3):522–530.

Bingley, P., Lyk-Jensen, S. V., and Rosdahl, A. (2022). Military service and skill acquisition: Evidence from a draft lottery.

Blaydes, L. (2018). *State of Repression: Iraq under Saddam Hussein*. Princeton University Press.

Boix, C. (2008). Economic roots of civil wars and revolutions in the contemporary world. *World Politics*, 60(3):390–437.

Brooks, J. E. (2004). *Defining the Peace: World War II Veterans, Race, and the Remaking of Southern Political Tradition*. Univ of North Carolina Press.

Cárdenas, M., Eslava, M., and Ramírez, S. (2016). Why internal conflict deteriorates state ca-

pacity? evidence from colombian municipalities. *Defence and Peace Economics*, 27(3):353–377.

Conquest, R. (1997). Victims of stalinism: A comment. *Europe-Asia Studies*, 49(7):1317–1319.

Davenport, C. (2007). State repression and political order. *Annual Review of Political Science*, 10.

De Bruin, E. (2021). Mapping coercive institutions: the state security forces dataset, 1960–2010. *Journal of Peace Research*, 58(2):315–325.

De Mesquita, E. B. and Shadmehr, M. (2023). Rebel motivations and repression. *American Political Science Review*, 117(2):734–750.

Dyadkin, I. G. (1983). *Unnatural Deaths in the USSR, 1928-1954*. Transaction Publishers.

Eynde, O. V. (2016). Military service and human capital accumulation: Evidence from colonial punjab. *Journal of Human Resources*, 51(4):1003–1035.

Gatrell, P. (2014). *Russia's First World War: A social and economic history*. Routledge.

Gregory, P. R. (2009). *Terror by Quota: State Security from Lenin to Stalin*. Yale University Press.

Gregory, P. R., Schröder, P. J., and Sonin, K. (2011). Rational dictators and the killing of innocents: Data from stalin's archives. *Journal of Comparative Economics*, 39(1):34–42.

Greitens, S. C. (2016). *Dictators and their Secret Police: Coercive Institutions and State Violence*. Cambridge Studies in Contentious Politics. Cambridge University Press.

G.U.R.K.K.A. (1926). *Imennoy spisok poter na frontakh v lichnym sostave Raboche-Krestyanskoy Krasnoy Armii za vremya grashdanskoy voyni [List of casualties at the fronts among the personnel of the Workers and Peasants' Red Army during the Civil War]*. Upravleniya ustroystva i slujby voisk G.U.R.K.K.A. [Directorate of the Creation and Service of the Troops of G.U.R.KK.A.].

Gurr, T. R. (1970). *Why Men Rebel*. Princeton University Press, Princeton, NJ.

Hofmeister, A. (2016). A war of letters–what do we read in soldiers'letters of russian jews from the great war? *Revue des études slaves*, 87(LXXXVII-2):181–193.

Huang, R. (2016). *The wartime origins of democratization: civil war, rebel governance, and political regimes*. Cambridge University Press.

Huff, C. and Schub, R. (2021). Segregation, integration, and death: Evidence from the korean war. *International Organization*, 75(3):858–879.

Humphreys, M. and Weinstein, J. M. (2008). Who fights? the determinants of participation in civil war. *American Journal of Political Science*, 52(2):436–455.

Jha, S. and Wilkinson, S. (2012). Does combat experience foster organizational skill? evidence from ethnic cleansing during the partition of south asia. *American Political Science Review*, 106(4):883–907.

Kalyvas, S. N. and Kocher, M. A. (2007). How “free”is free riding in civil wars?: Violence, insurgency, and the collective action problem. *World politics*, 59(2):177–216.

Kessler, G. (2017). Map of the 1897 russian empire - uezd level.

Khlevniuk, O. (2004). The history of the gulag: from collectivization to the great terror. *Annals of.*

Kotkin, S. (2017). *Stalin: Waiting for Hitler, 1929-1941.* Penguin Books Limited.

Krebs, R. R. and Ralston, R. (2022). Patriotism or paychecks: Who believes what about why soldiers serve. *Armed Forces & Society*, 48(1):25–48.

Leal, D. L. and Teigen, J. M. (2018). Military service and political participation in the united states: Institutional experience and the vote. *Electoral Studies*, 53:99–110.

Lee, C. (2012). Military service and economic mobility: Evidence from the american civil war. *Explorations in economic history*, 49(3):367–379.

Levi, M. (1997). *Consent, dissent, and patriotism.* Cambridge University Press.

Lohr, E. (2003). *Nationalizing the Russian empire: The campaign against enemy aliens during World War I*, volume 94. Harvard University Press.

Lupu, N. and Peisakhin, L. (2017). The legacy of political violence across generations. *American Journal of Political Science*, 61(4):836–851.

Lyall, J. (2020). *Divided Armies: Inequality and Battlefield Performance in Modern War.* Princeton University Press.

Mampilly, Z. C. (2012). *Rebel Rulers: Insurgent Governance and Civilian Life During War.* Cornell University Press.

Martinez, L. (2000). *The Algerian civil war, 1990-1998.* Columbia University Press.

Mason, T. D. and Krane, D. A. (1989). The political economy of death squads: Toward a theory of the impact of state-sanctioned terror. *International Studies Quarterly*, pages 175–198.

Memorial (2014). Zhertvy politicheskogo terrora v SSSR [victims of political terror in the USSR].

Murphy, D. E. (2006). *What Stalin knew: the enigma of Barbarossa*. Yale University Press.

Onkst, D. H. (1998). " first a negro... incidentally a veteran": black world war two veterans and the gi bill of rights in the deep south, 1944-1948. *Journal of Social History*, pages 517–543.

Pamyati Geroev (2020). Pamyati geroev velikoy voyni [in memory of the heroes of the great war 1914-1918].

Parker, C. S. (2009). When politics becomes protest: Black veterans and political activism in the postwar south. *The Journal of Politics*, 71(1):113–131.

Qian, N. and Tabellini, M. (2021). Discrimination and state capacity: Evidence from wwii us army enlistment. Technical report.

Reiter, D. and Stam III, A. C. (1998). Democracy and battlefield military effectiveness. *Journal of Conflict Resolution*, 42(3):259–277.

Richard, B. and Wilhite, A. (1990). Military experience and training effects on civilian wages. *Applied economics*, 22(1):69–81.

Rozenas, A. (2018). A theory of demographically targeted repression.

Rozenas, A., Schutte, S., and Zhukov, Y. (2017). The political legacy of violence: The long-term impact of stalin's repression in Ukraine. *Journal of Politics*, 79(4):1147–1161.

Rozenas, A., Talibova, R., and Zhukov, Y. (2022). Fighting for tyranny: State repression and combat motivation. Working paper.

Rozenas, A. and Zhukov, Y. (2019). Mass repression and political loyalty: Evidence from stalin's' terror by hunger'. *American Political Science Review (forthcoming).*

Sampson, R. J. and Laub, J. H. (1996). Socioeconomic achievement in the life course of disadvantaged men: Military service as a turning point, circa 1940-1965. *American sociological review*, pages 347–367.

Shadmehr, M. (2014). Mobilization, repression, and revolution: Grievances and opportunities in contentious politics. *The Journal of Politics*, 76(3):621–635.

Shearer, D. R. (2014). *Policing Stalin's socialism: Repression and social order in the Soviet Union, 1924-1953*. Yale University Press.

Skocpol, T. (1994). *Social revolutions in the modern world*. Cambridge University Press.

Stewart, M. A. (2021). *Governing for Revolution: Social Transformation in Civil War*. Cambridge University Press.

Stone, D. R. (2021). *The Russian Army in the Great War: The Eastern Front, 1914–1917*. University Press of Kansas.

Stouffer, S. A., Lumsdaine, A. A., Lumsdaine, M. H., Williams, Robin M., J., Smith, M. B., Janis, I. L., Star, S. A., and Cottrell, Leonard S., J. (1949). *The American Soldier: Combat and Its Aftermath*. Princeton University Press, Princeton.

Talibova, R. (2022). Repression, military service and insurrection. Working paper.

Tilly, C. (1978). *From Mobilization to Revolution*. Addison-Wesley.

Tilly, C. (1992). *Coercion, capital, and European states, 990-1990*. Blackwell.

Troynitsky, N. (1899). The first total census of russian empire in 89 volumes. *The Central Statistical Bureau of the Ministry of Internal Affairs of the Russian Empire, St. Petersburg*, 1905.

Turner, S. and Bound, J. (2003). Closing the gap or widening the divide: The effects of the gi bill and world war ii on the educational outcomes of black americans. *The Journal of Economic History*, 63(1):145–177.

Tyson, S. A. (2018). The agency problem underlying repression. *The Journal of Politics*, 80(4):1297–1310.

Viola, L. (2007). *The unknown gulag: the lost world of Stalin's special settlements*. Oxford University Press, USA.

Volkov, S. (2016). Uchastniki belogo dvijeniya v rossii [participants of the white movement in russia].

Weinstein, J. (2007). *Inside Rebellion: The Politics of Insurgent Violence*. Cambridge University Press, Cambridge.

Wildman, A. K. (2014). *The End of the Russian Imperial Army: The Old Army and the Soldiers' Revolt (March-April, 1917)*. Princeton University Press.

Young, L. (2019). The psychology of state repression: Fear and dissent decisions in zimbabwe.

American Political Science Review, 113(1):140–155.

Zakharov, A. and Sonin, K. (2024). The anatomy of the great terror: A quantitative analysis of the 1937-38 purges in the red army. *University of Chicago, Becker Friedman Institute for Economics Working Paper*, (2024-154).

Zhukov, Y. M. and Talibova, R. (2018). Stalin's terror and the long-term political effects of mass repression. *Journal of Peace Research*, 55(2).