

Ideas in Motion: The Impact of Russian Literature

Vladimir Avetian*

Sultan Mehmood[†]

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Abstract

Can the written word spark resistance against an autocratic state? To explore this question, we delve into Russian literature from its Golden Age, assessing how Russian writers may have fueled violent dissent against the State. We provide evidence that penetration of the magazine, notably carrying works of Russian literary giants that called for democratic change, intensified violent attacks against the Czar's regime. Utilizing the "circle of Alexander Pushkin," the legendary Russian poet and founder of the magazine, as a source of exogenous variation in the magazine's spread in the early years and controlling for the pre-treatment density of writers in each municipality, we show the relationship is likely causal. An instrumental variable strategy, focusing on the spread of the magazine through "haphazard" or "one-off" encounters with Pushkin, provides further causal leverage to our findings. Exploration of mechanisms reveals that the magazine inspired a new generation of Russian writers to write for political change. We test for and find evidence against several threats to identification. Overall, our findings underscore that Russian literature, one of recorded human history's greatest literary achievements, wielded a profound influence, serving as a catalyst for political violence and fueling the flames of resistance against the repressive Russian State.

"So you're the little woman who wrote
the book that started this great war,"

Attributed to Abraham Lincoln

1. INTRODUCTION

Throughout history, the written word is believed to be a potent force for sparking political action and even violence, with iconic texts like Plato's "Republic" and "Apology" calling for critical examination of the structures of power that govern society. Even today, a diverse array of written materials, including novels, essays, manifestos, and journalistic reports, continues to be crafted with the intent to inspire and mobilize political movements

*University Paris-Dauphine - PSL, *Chair of Governance and Regulation*: vladimir.avetian@dauphine.psl.eu

[†]New Economic School: smehmood@nes.ru

worldwide. While literature's impact is often considered self-evident, scholars have long offered a contrasting view, suggesting its influence is limited when compared to overarching historical, economic, and cultural forces (Bourdieu, 1979; Moore, 1993; Skocpol, 1979). These scholars contend that literature is more often a reflection of prevailing cultural and institutional transformations rather than a driving force behind them. Despite the long-standing belief in literature's transformative power, a significant gap persists in empirical research, leaving questions about the extent and nature of literature's impact on political movements largely unanswered. To what extent does literature serve as a catalyst for political violence? What underlying mechanisms connect the written word to acts of political violence?

In this paper, we show how literature plays a pivotal role in fueling political violence against the State. We offer empirical evidence from a celebrated chapter in literary history: the Golden Age of Russian literature, an era distinguished by the publication of seminal works by literary giants such as Alexander Pushkin, Leo Tolstoy, and Fyodor Dostoevsky. We show that the dissemination of Russian literature throughout the Russian Empire unleashed a wave of left-wing political violence, ultimately contributing to the Czar's assassination and setting off revolutionary actions against subsequent regimes for decades to come.

In mapping the influence of Russian literature, we harness the reach of *Sovremennik*, a watershed publication founded and championed by Alexander Pushkin, the Russian Empire's literary titan. We demonstrate that counties where this magazine had a broader reach witnessed higher political violence against the State. The enduring impact of written literature influenced subsequent generations of Russian writers. An analysis of the magazine's corpus indicates a transition of content of writers, moving from "art for art's sake" to "art for societal change,". Geocoding the birth of Russian writers also reveals that the spread of the magazine was associated with emergence of a new breed of Russian writers emerging to rally for violent political change.

The *Sovremennik* magazine, which we focus on, provides an ideal context for studying the effect of literature on political violence. First is the significance and profound influence of the magazine, which served as a vehicle for introducing Russian literature to society, especially the later writings in the magazine that called for political change, which largely

escaped outright ban and complete censorship due to their often subtle and ingenious writing, effectively circumventing the censor boards. Founded by Alexander Pushkin, widely celebrated as the “Father of Russian Literature,” it created a crucible for literary talent, showcasing the works of seminal writers such as Nikolai Gogol, whose early stories the magazine published, and fostering the careers of future literary giants like Ivan Turgenev, Fyodor Dostoevsky, and Leo Tolstoy. The magazine soon spread all across the Russian Empire, from the western borders of modern-day Poland to the eastern shores near the Sea of Japan, providing a highly granular county-level variable of exposure to Russian literature across one of the largest empires in world history. Second, 19th-century magazine literature emerged as the primary conduit for Russian writers to explore and refine the ‘new’ literary art forms of prose and poetry. Legendary Russian writer Gogol, writing during this era, aptly characterized it: “Magazine literature, this lively, fresh, talkative, sensitive literature, is as necessary for the sciences and the arts as communication routes are for the state, as fairs and exchanges are for merchants and trade.” Finally and importantly, to evaluate the influence of Russian literature, the distribution network of *Sovremennik* magazine across the Russian Empire, reaching nearly 800 counties, offers a level of granularity that is rarely available in other contexts.

This study is anchored by an extensive data collection and digitization endeavor. It harnesses a constellation of historical datasets that depict the intellectual and political landscape of the Russian Empire, the majority of which are being utilized for the first time. First, we curate and consolidate a trove of literary texts published over the entire course of the magazine’s existence, starting in 1836, the year it was launched by Alexander Pushkin, and ending with the magazine’s final issue banned by an 1866 the Russian Czar’s decree. This corpus enables us to construct a comprehensive analysis akin to a historical ‘Google Trends’ of Russian intelligentsia in the 19th century, the most seminal and productive decades of Russian literature, often referred to as the Golden Age of Russian literature. Second, we map the spatial diffusion of the magazine by showcasing subscriber data from over 800 counties (uezds) across the Russian Empire during a politically volatile time from 1859 to 1861—the zenith of the great reform era—when the magazine adopted its most audacious political posture. To the best of our knowledge, we are the first to chart the geographical dissemination of 19th-century Russian literary culture through the prism

of the written word in a systematic empirical analysis at the level of the county. To construct our measure of political violence, we leverage “The Book of Russian Sorrow” — using all 14 volumes that chronicles political violence against the Czarist regimes by left-wing revolutionaries, providing a lens through which to examine the era’s major episodes of political violence. Finally, to construct our instrumental variable, we leverage a literary monograph, “Pushkin and his Entourage” ([Chereiskii, 1988](#)) that meticulously records and authenticates over 2,500 interactions between the public and the poet Alexander Pushkin, the magazine’s founder. This dataset encompasses both his close connections and incidental encounters amassed during his extensive journeys, where we use the chance meetings of Pushkin to instrument for early spread of the magazine.

A key challenge in gauging the effect of literature on political violence lies in recognizing that counties with lower versus higher access to Russian literature differ in many factors beyond just access to literature. The spread of Russian literature through the *Sovremennik* magazine is likely endogenous to community characteristics. Counties with higher levels of education, political awareness, or development are not only more inclined to subscribe to the magazine but also more likely to participate in political violence. Consequently, OLS estimation of magazine subscriptions with political violence is likely to yield biased estimates.

To address these identification concerns, we draw upon the the meticulous record of Alexander Pushkin’s “encounters” with the citizenry by ([Chereiskii, 1988](#)). Focusing on one-off or chance encounters with the legendary poet, we construct an instrumental variable for the magazine’s subscriptions by examining how Pushkin’s incidental interactions with the public facilitated the magazine’s early dissemination and its ensuing impact on political violence.

Using this instrumental variable strategy, we find that the magazine had a strong and robust impact on political violence in the years leading to the Bolshevik revolution. Our findings suggest a one-percentage-point uptick in magazine subscriptions correlates with a 0.16 percentage-point rise in the probability of district-level attacks. These IV estimates are significantly larger—approximately twice the magnitude—than those obtained via ordinary least squares (OLS), hinting at a likely underestimation by OLS. To illustrate the significance of these results, it is worth noting that a 0.16 percentage point increase is

equivalent to a 60% surge in violent attacks when compared to the mean of the sample.

While the instrumental variable approach helps mitigate several sources of endogeneity, there remains a key threat to identification: it may be the case that Pushkin is more likely to meet people in counties where there is a significant appetite for critical literature and a high propensity for politically motivated violence. To address this issue, we take three steps. First, we ran the same analysis not for the entire Pushkin circle but for people he only met incidentally and just once. In these specific cases, we also observe a strikingly high correlation between magazine subscriptions and Pushkin encounters, which eventually translates to subsequent political violence. Second, insofar as the Pushkin circle captures some unobserved appetite for literature generated by literary culture in the district, we explicitly control for the pre-treatment density of writers and find our results to be robust. Finally, to address the concern that the Pushkin circle merely represents the literate public, we control the effects of literacy. We present evidence that the reach of the Pushkin circle and the magazine's distribution remains unaffected by, and are not confounded with, variations in literacy levels. Taken together, the evidence supports a causal interpretation of our results and suggests that the *Sovremennik* magazine was not just a mere reflection of its time but also as a potential influencer in the rise of political violence in the Russian Empire.

Having documented the substantial impact of *Sovremennik* magazine on political violence in the Russian Empire, we geolocate and profile Russian writers from 1700 onwards to study the underlying mechanisms. Our findings suggest that in counties where *Sovremennik* had wider reach, appear to nurture new breed of literary talent. The proliferation of the magazine correlates positively with the emergence of a new cadre of Russian writers, who may have played a role in fomenting political violence and dissent.

This paper relates to several strands of literature. First, it relates to literature on mass media and conflict. Our paper makes a novel contribution to the existing body of literature by systematically exploring the impact of literature—an art form long thought to shape politics—on political violence. While previous research has primarily examined the role of mass media such as the Radio in conflict dynamics ([Adena, Enikolopov, Petrova, Santarosa, & Zhuravskaya, 2015](#); [DellaVigna, Enikolopov, Mironova, Petrova, & Zhuravskaya, 2014](#); [Durante & Zhuravskaya, 2018](#); [Enikolopov, Makarin, & Petrova, 2020](#); [Yanagizawa-](#)

[Drott, 2014](#)), our study shifts the focus to the realm of literary influence. Historians and political scientists have acknowledged the literature's to shape public opinion and, by extension, constrain political and military decisions. Our research extends this perspective by providing empirical evidence that Russian literature, particularly during its golden age, played a significant role in mobilizing dissent and shaping the public's views towards the state, which in turn contributed to the manifestation of political violence. This underscores the power of literary works as a form of media capable of swaying public sentiment and inciting action against autocratic regimes. Our findings not only enrich the understanding of the media's role in conflict but also highlight the unique and potent role of literature in the historical context of political resistance.

Second, our study contributes to the ongoing debate on the forces that shape pivotal moments in world history: structure or agency. This debate often pits proponents of deep structural forces – economic, political, and the like ([Moore, 1993](#); [Skocpol, 1979](#)) – against those who emphasize the agency of individual actors ([Mahoney & Snyder, 1999](#)). Our research aligns with a burgeoning body of empirical work that supports the notion that individual leaders and central figures in hierarchical networks can significantly influence organizational performance ([Bandiera, Prat, Hansen, & Sadun, 2020](#); [Bertrand & Schoar, 2003](#); [Jackson & Yariv, 2011](#)), and nation building ([Assouad, 2020](#)). We show that Russian literature and its literary stars, during the golden age of Russian literature, acted as central agents in shaping the narrative against the autocratic state, thereby unleashing a wave of political violence leading up to the Bolshevik revolution.

Last, study builds upon a rich body of literature that examines the interplay between culture, institutions and development ([Acemoglu and Robinson \(2012\)](#), [Guiso, Sapienza, and Zingales \(2006\)](#), [Alesina and Giuliano \(2010\)](#)). By integrating these perspectives with a novel dataset on both the spread of early Russian Literature with data on political violence, we extend the debate of literature as an influencer rather than a consequence of political institutions. In doing so, we provide empirical evidence that complements theoretical models of cultural transmission and its long-term effects on socio-economic structures, as suggested by the work of [Tabellini \(2010\)](#). More specifically, we contribute to the literature on culture and institutions in the context of Russian economic history ([Zhuravskaya, Guriev, & Markevich, 2021](#)), such as work related to the economic consequences

of the abolition of serfdom ([Bugge & Nafziger, 2021](#); [Markevich & Zhuravskaya, 2018](#)).

The structure of the paper is as follows: Section 2 provides the historical context for our study, highlighting the golden age of Russian literature, the pivotal role of Alexander Pushkin in Russian literary history, and the evolution of his magazine. Section 3 introduces the data and presents some descriptive statistics. Section 4 outlines our empirical methodology, while Section 5 discusses our main findings and the mechanisms at play. The paper concludes with Section 6, summarizing our results and their implications.

2. HISTORICAL BACKGROUND

Golden Age of Russian Literature. The Golden Age of Russian Literature, though relatively brief, was a period of remarkable productivity: its major works were created within the lifetime of one of its most illustrious writers, Leo Tolstoy (1828 - 1910). As an integral part of the European Enlightenment tradition, Russian literature of this time was characterized not only by its formal and poetic inventiveness but also by its moral concerns and preoccupation with social injustice. Oftentimes, it served as an arena for public debates in a region plagued by stringent censorship, a legacy predating the establishment of a well-defined literary tradition and even Russian Empire itself. A critical spirit was ignited with the publication of Russian literature's seminal work, Radishchev's "Journey from Saint Petersburg to Moscow." This book, a scathing critique of the illiberal policies of the Russian Empire, which was described in its epigraph as "an enormous, disgusting, hundred-mawed and barking monster". The repercussions were as severe as the critique itself, leading to the author's exile to Siberia and the book's suppression for more than a hundred years.

Alexander Pushkin, widely acknowledged as the father of the Golden Age, then established a more subtle yet equally reflective literary tradition. This era gave birth to a plethora of world-renowned works, ranging from Pushkin's "Eugene Onegin" to Tolstoy's "War and Peace". The political undertones of these works evolved from being parabolic in the first half of the century to reaching the polemical heights of Radishchev's style in the latter half, particularly evident in the socially critical literature of the 1860s. Importantly, Pushkin was not only a pioneer in this literary mode but also a key promoter. Less than a year before his abrupt death, he founded one of Russia's most important magazines,

Sovremennik. This publication, in the decades that followed, opened its pages to writers who are now hailed as literary giants

“Sovremennik” and Magazine Literature. Pushkin harbored plans for creating his own magazine for many years, but only succeeded in doing so on the eve of his death. As a result, only four issues were published during Pushkin’s lifetime, with the fifth dedicated to his demise. Pushkin’s letters attest that he actively promoted his magazine among his acquaintances ([Izmailov, 1969](#)). These factors – the creation of Pushkin’s magazine, his early death, and the fact that our treatment period relates to the late period of the magazine, decades later – are key premises for our identification strategy.

The magazine existed for 30 years, being published in Saint Petersburg and distributed across the empire’s regions by post on a subscription basis. From 1836 to 1843, the magazine was issued quarterly, then monthly. After Pushkin’s death in 1837, Petr Pletnev managed the publication until 1846. In 1846, the magazine was sold to Nikolay Nekrasov and Petr Panaev, marking its second life. Nekrasov’s poetry had a distinct social orientation, and under his leadership, the magazine gradually drifted towards more radical positions. This trend intensified when Nekrasov brought Nikolay Chernyshevsky, a key social utopian of the era, and a member of the revolutionary-democratic movement, into the magazine’s management. Lenin, born four years after the magazine’s closure, considered Chernyshevsky and his works published in *Sovremennik* as his key influences ([Valentinov, 1968](#)): “My favorite author was Chernyshevsky. I read everything printed in *Sovremennik* to the last line, more than once... He plowed me up more profoundly than anyone else.” However, not only socially oriented literature was published in *Sovremennik*; for a long time, a second faction coexisted with the more radical one – liberal gentry, represented by Leo Tolstoy and Ivan Turgenev. Over time, the more radical direction gained dominance, which ultimately indirectly led to the magazine’s closure.

In 1866, a 25-year-old young man, Dmitry Karakozov, committed the first revolutionary-terrorist act in the history of the Russian Empire and modern Europe ([Verhoeven, 2004](#)) – an unsuccessful assassination attempt on Csar Alexander II. Karakozov, an avid reader of *Sovremennik*, was found to have copies of the magazine during a search. As a result of this, the magazine was closed by the personal order of the Csar.

Political violence in Russia Empire. Political violence became a constant factor starting with the unsuccessful assassination attempt by Karakozov, which sparked a wave of conservative reaction. This included, as previously mentioned, the closure of the liberal press. The reaction, in turn, fueled even more political violence from the radical-left revolutionaries. The Narodnik movement, inspired by Chernyshevsky, gradually became disillusioned with peaceful methods of fighting for political change. In 1879, the illegal populist party 'Narodnaya Volya' (People's Will) was formed, choosing individual terror as one of its methods. Fifteen years after Karakozov's failed attempt on the Csar, in 1881, members of Narodnaya Volya, hoping to provoke a revolution, completed Karakozov's mission by assassinating Emperor Alexander II.

Political violence reached its peak in the early 20th century, with the emergence of the combat organization of the Socialist-Revolutionary Party, as well as the escalating struggle between the secret police (Okhrana) and secret revolutionary political organizations. Victims of bombs and shootings included Grand Duke Sergei Alexandrovich Romanov, several Ministers of Foreign Affairs and Interior Ministers, and thousands of lower-ranking government officials. It is in this context that one of the main sources used in this study, the "Book of Russian Sorrow", becomes relevant. Published by the political antagonists of the left revolutionaries – ultra-nationalists and monarchists led by Vladimir Purishkevich – these 14 volumes, released serially from 1908 to 1914, aimed to present the officials killed in attacks as martyrs who died "for the Csar and for their faith", as well as "fighting an internal enemy". In this sense, the compilation of such a martyrology mirrored the ideological discourse of the revolutionaries, which glorified radical activists as martyrs of the liberation movement.

3. DATA AND DESCRIPTIVE STATISTICS

Sovremennik Corpus. To trace the evolution of discourse over the 30 years of *Sovremennik's* existence, we extracted texts published in the magazine and constructed a corpus of the magazine. The magazine issues were scanned thanks to the Google Books project. While the digitization of texts is not flawless, particularly in extracting more complex layouts of magazines, their internal structure, and division into articles, its quality still allows for a descriptive analysis of the text corpus. The primary data grouping we perform is by

year of publication, so as a result, we obtain time series that demonstrate the evolution of themes in the magazine.

To categorize the content of the magazines in terms of proximity to various topics, we apply several text analysis methods. As a result, our baseline approach combines a dictionary-based and word embedding methods, an approach that has recently found many applications in economic literature ([Ash & Hansen, 2023](#)). Briefly, it can be described as follows. We formed several short, hand-selected dictionaries that characterize three socio-political topics of interest: terms associated with democratic institutions, terms related to the economic structure, and terms related to the key factor of the political life of the era – serfdom and peasantry. We also validated our corpus by checking the frequency of use of the most common functional words in the Russian language. As a next step, we trained a word2vec model ([Mikolov, Chen, Corrado, & Dean, 2013](#)) on the *Sovremennik* text corpus, and then, using the model, enriched our initial dictionaries by including additional terms with the greatest cosine distance to our original dictionaries, while excluding ambiguous terms.

Data on *Sovremennik* Subscriptions. Our primary dataset highlights the geographical distribution of subscriber numbers, detailed at the district level, encompassing over 800 districts during our observation period. This unique dataset, essential to our research, derives from the *Sovremennik* authors themselves. Nikolai Chernyshevsky published these data in several issues from 1860 to 1862. Aggregated annually for 1859, 1860, and 1861, the total subscriber counts were 5500, 6598, and 6658, respectively. Chernyshevsky compiled this information from the St. Petersburg post office’s newspaper dispatch list. His original goal, similar to our present analysis but limited by the lack of advanced statistical tools of his time, was to assess regional ‘reading enthusiasm’ in Russia and to evaluate journalistic impact. Additionally, we geocoded the district towns and, where necessary, aggregated the data, integrating it with the map provided by [Essler and Markevich \(2020\)](#).

Data on Political Violence. As mentioned earlier, our data on political violence were gathered from the “Book of Russian Sorrow,” a compilation of biographical articles about victims of radical left attacks. The victims listed are state officials, with a wide variance in rank, extending from the emperor to the lowest police ranks. An illustration of one such

attack can be viewed in Figure A.1 in Appendix A.

To extract and geolocate data on these attacks, we processed the collection's texts, extracting paragraphs describing the acts of political violence. We then extracted locations in the nominative case and dates using the OpenAI API, which we manually validate each attack, and geocoded these locations. The novel dataset presents over 600 attacks, geographically scattered across the Russian Empire, offering a comprehensive picture of acts of political violence. This detailed mapping of political violence during the early 20th century can be seen in Figure A.2 in Appendix A.

Data on Pushkin Encounters. To construct our instrumental variable, we rely on a unique academic monograph documenting approximately 2,500 of Pushkin's encounters. These contacts, sourced from written records, range from well-known significant connections to brief, incidental meetings. Here are examples of such 'incidental meetings' from the book:

- LARIN Ilya (Illarion) Ivanovich - a retired feuerwerker in Kishinev. Played the role of a buffoon in the society of officers, among whom Pushkin was also present
- PETERSON - St. Petersburg piano tuner. Feb. 12. 1837 The guardianship paid him the poet's debt of 85 rubles.

The ephemeral nature of such encounters is well approximated by the length of the article, which we use in our robustness checks.

To extract geographical variation from this database and construct our instrumental variable, we adopted an approach inspired by the literature on early adopters instruments, such as in [Enikolopov et al. \(2020\)](#). We endeavored to determine and geocode the birthplace of each individual Pushkin met. When this was impossible, we sought their place of residence. If neither was ascertainable, we used the meeting location, typically specified in the book's article. Thus, we were able to manually assign a district to the majority of the 2,500 observations.

Wikimedia Data. We utilized the Wikidata project to extract information on all known writers born in the Russian Empire starting from 1700. Data retrieval was conducted using a special query language developed by Wikimedia. We extracted details such as the author's name, birthplace, birth and death years, and the coordinates of the birthplace, if

available. Given that Wikidata largely overlaps with Wikipedia data, our primary assumption is that this method allows us to map the geographical distribution of writers who have left a lasting cultural impact, significant enough to warrant inclusion in the encyclopedia.

4. EMPIRICAL METHODOLOGY

To trace the impact of *Sovremennik* on political violence, we estimate the equation of the following form:

$$\begin{aligned} \text{Log of Political Violence}_{1900-1914,i} = & \beta_0 + \beta_1 \text{Log of Sovremennik Exposure}_{1859-1861,i} \\ & + \beta_2 \mathbf{X}_i + \gamma_i + \epsilon_i \end{aligned} \quad (1)$$

where $\text{Log of Political Violence}_{1900-1914,i}$ is the log of the political violence plus 0.1; $\text{Log of Sovremennik}_{1859-1861,i}$ is the logarithm of the number of *Sovremennik* plus 0.1; $\mathbf{X}_i$ is a vector of control variables that includes distance to Moscow, distance from Saint Petersburg, linear controls for latitude and longitude, share of serfs prior to the abolition, the logarithm of the population density, the logarithm of the number of writers born before *Sovremennik* existence. When control variables are missing for some of the counties, as is the case with population density and the share of serfs, we impute them using the median value. Standard errors are clustered at the more conservative province (Gubernia) level, although the results remain robust to clustering at the level of identifying variation that is at the county (uezd) level.

An OLS estimation of β_1 is likely to give biased estimates. This is because unobserved characteristics of the districts, such as societal inclinations, drive individuals to both subscribe to the *Sovremennik* magazine and participate in acts of political violence.

To address this issue, we leverage the comprehensive record of Alexander Pushkin's interactions with the public as documented by 2500 verified encounters in ([Chereiskii, 1988](#)). By focusing on the chance encounters between the Pushkin and citizens across Russian empire, we construct an instrumental variable that offers a source of quasi-random variation, reflecting the initial dissemination of the magazine via Pushkin's spontaneous encounters (for full range of his encounters across the Russian Empire, see Figure A.3 of Appendix A).

5. MAIN RESULTS

Impact on Political Violence. In our empirical investigation, we commence by applying Ordinary Least Squares (OLS) to estimate Equation (1). The initial findings, as delineated in Table 1, Panel A, Columns (1) and (2), suggest a substantive effect of *Sovremennik*'s exposure on political violence. Specifically, a 10-percentage-point increase in exposure of the magazine is associated with an approximate 8-percentage-point escalation in political violence against the state (Column 2).

However, these OLS estimates may be compromised by potential endogeneity. The propensity for magazine subscription could be influenced by factors intrinsic to the counties, such as anti-government sentiment or localized grievances against the state in a particular county. Although the incorporation of an extensive array of controls—including geographical proximities to Moscow and St. Petersburg, as well as province fixed effects—aims to alleviate some of these concerns, the potential for bias persists. This is primarily due to the non-random distribution of *Sovremennik* magazine across the counties of the Russian Empire.

To address the potential endogeneity in magazine subscriptions, we utilize an instrumental variable (IV) approach, leveraging "Pushkin's circle"—the social network of the magazine's founder—as an instrument. This network is posited to have catalyzed the early adoption of *Sovremennik*. The first-stage relationship between magazine subscriptions and Pushkin's contacts is depicted in Table 1, Panel B, Columns (3) and (4). The robust first-stage results are substantiated by F-statistics significantly surpassing the conventional benchmark of 10, affirming the instrument's relevance (?). This strong first stage relationship is most apparent in a visually, where a scatter plot in Figure A.5 of Appendix A illustrates the robust positive correlation between magazine subscribers and Pushkin encounters. Employing the two-stage least squares (2SLS) technique, the estimated impact of magazine subscriptions on political violence becomes more pronounced. The 2SLS estimates are approximately twice the magnitude of the OLS estimates, indicating that a 10-percentage-point increment in subscriptions correlates with an 18-percentage-point increase in political violence—this represents a 60% escalation relative to the mean of the dependent variable.

Identification Checks. A primary concern in identifying the influence of Pushkin is the potential bias arising from his tendency to interact with individuals in regions known for a strong interest in critical literature and a propensity for political violence. Notwithstanding the results reported in Table 1, one might argue that “Pushkin’s circle” could be endogenous, particularly if the network was more present in counties with a higher propensity for anti-state violence. Textual analysis of the *Sovremennik* magazine corpus during its initial period under Pushkin reveals a predominantly apolitical orientation (Figure 4), with a focus on the “art for art’s sake” movement and a significant portion of content devoted to non-political subjects such as fashion during the early years. However, the potential for “Pushkin’s circle” to inherently attract those more inclined to dissent cannot be entirely ruled out. This raises concerns regarding the validity of the instrument exclusion restriction—if Pushkin was more likely to meet individuals in politically volatile counties, even during the magazine’s apolitical phase, then our IV estimates may still be susceptible to bias.

To address the concern regarding the potential endogeneity of “Pushkin’s circle,” we delve into the granularity of the 2,500 encounters documented by [Chereiskii \(1988\)](#) involving Pushkin. This analysis focuses on a subset of these encounters, specifically those that are incidental or random—such as instances where Pushkin met individuals only once. The results of this approach are presented in Table 2, which confirms the robustness of the first stage and reveals that the 2SLS estimates derived from this restricted sample are nearly identical to the 2SLS estimates obtained from the broader instrument (in Table 1). The consistency of these findings bolsters our confidence in employing “Pushkin’s circle” as the overall instrument (likely because Pushkin publicized this magazine through his network without particular attention to predisposition to violence against the state). The results remain compelling: a 10-percentage-point increase in magazine subscriptions is associated with an approximately 18-percentage-point rise in political violence.

Concerns regarding identification also extend to the possibility that regions with a literary bent are predisposed to both interactions with Pushkin and a heightened appetite for political violence. To counteract this, as detailed in Tables 1 and 2, we consistently control for the pre-treatment density of writers, which significantly alleviates this issue.

Furthermore, we considered the possibility that magazine subscriptions, and by ex-

tension our instrumental variable of Pushkin circle, might merely mirror a literate demographic that Pushkin encountered—individuals who are inherently more inclined to protest and engage in political violence. However, as demonstrated in Table 3, our analysis reveals that literacy rates at the time of our subscription and political violence data are not correlated with magazine subscriptions. This finding is consistent across both Ordinary Least Squares (OLS) and Instrumental Variable (IV) analyses, suggesting that our results are not merely capturing the tendencies of an educated elite.

Mechanisms: Analysis of Corpus and Future Writers. Our examination of the mechanisms at play commences with a detailed descriptive analysis of the *Sovremennik* magazine, tracing the evolution of its content across the decades, as depicted in Figure 4 (Panels a and b). The initial observation is the abrupt end to Pushkin’s direct influence on the magazine following his untimely death in a duel (just 9 months after the magazine founding). During Pushkin’s tenure and in the years immediately after, the magazine’s content was notably less political, suggesting that the early subscribers are not likely to be predominantly from regions with heightened anti-government sentiment.

However, as we approach the pivotal period of serfdom’s abolition in 1861, there is a marked increase in the magazine’s political discourse, with topics such as democracy, worker rights, and economic issues gaining prominence (Figure 4). This period coincides with the era from which our subscriber data originates, suggesting that the magazine’s potential role in influencing political violence could be attributed to its increasingly political content, particularly its shift towards advocating for political change.

This hypothesis is further substantiated by quantitative evidence. By profiling Russian writers born since 1700, we have been able to determine whether regions with a higher distribution of the *Sovremennik* magazine, potentially due to the Pushkin circle’s influence, also experienced a surge in writers who advocated for political change. The findings presented in Table 4 indicate that post-magazine ban, there was a statistically and qualitatively significant increase in the birth of writers in areas where the magazine had a higher exposure, suggesting a correlation between the magazine’s circulation and the emergence of politically engaged writing class. This trend implies that the *Sovremennik* magazine may have played a catalytic role in shaping the literary landscape towards a more politically

active and even violent direction.

6. CONCLUSION

In conclusion, our study provides evidence that literature, particularly during the Golden Age of Russian literature, played a significant role in inciting political violence against the autocratic Russian State. By examining the distribution and influence of *Sovremennik* magazine, we showed how the written word may foment violent resistance. Our findings are robust, surviving various tests against potential threats to identification, and are supported by an instrumental variable strategy that leverages the unique historical figure of Alexander Pushkin and his incidental encounters with the public. Our analysis of the underlying mechanisms suggests that the spread of *Sovremennik* magazine was instrumental in inspiring a new cadre of Russian writers committed to political reform, a factor that likely fueled the escalation of political violence and dissent where the magazine circulated.

The implications of our study are manifold. First, it underscores the transformative power of literature as a medium that can transcend mere artistic expression to become a force for political and social change. Second, it contributes to the broader discourse on the role of media in shaping political outcomes, suggesting that literature, much like modern mass media, could impact public sentiment and catalyze collective action. Third, it provides empirical support for the agency-centric view of history, highlighting the role of individual actors and networks in shaping historical events.

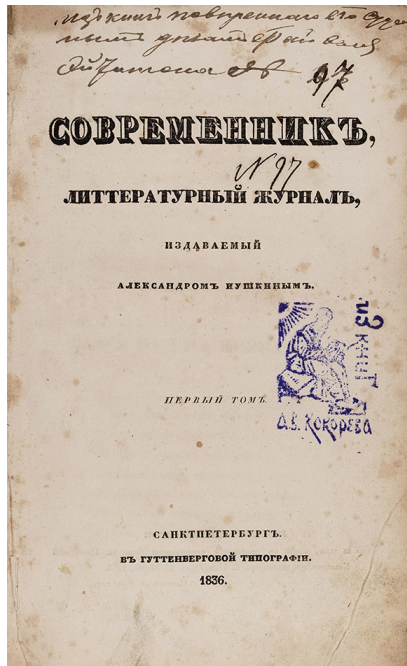
We conclude that the pen, indeed, can be not just mightier than the sword but can actually be an instrument –a call for swords in itself. The written word, as evidenced by the Russian literary movement, had the power to spark the flames of political violence. As we continue to witness the impact of media on political landscapes around the world, the lessons drawn from the Golden Age of Russian literature remain as relevant, reminding us of the enduring influence of the written word. Future studies could may explore the influence of contemporary literature and other artistic mediums, such as cinema, on political dissent and violence.

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FIGURE I: Measuring Penetration of Russian Literature and Political Violence



(A) One of "Sovremennik" issues



(B) One of the volumes of "The Book of Russian Sorrow"

FIGURE II: The Article on the Assassination of Tsar Alexander II

КНИГА I 1908 г.

Император Александр II
Убит в С.-Петербурге 1 марта 1881 г.

18 апреля 1818 г. Первопрестольная Москва пушечными выстрелами была оповещена о рождении у Великого князя Николая Павловича сына-первенца.
Поэт В. А. Жуковский приветствовал рождение Августейшего Младенца, нареченного при крещении в Чудовом монастыре Александром, стихами, заключившими пророчество его будущего величия и славы:

С душой, на все прекрасное готовой,
Наставленным: достойным счастья быть,
Великое с величием сносить,
Не трепетать, встречая рок суровый,
И быть в делах времен своих красой.
Лета пройдут, подвижник молодой,
Откинувши младенчества забавы,
Он полетит в путь опыта и славы...
Да встретит он обильный чеством век!
Да славного участник славный будет!
Да на чреде высокой не забудет
Святейшего из званий: человек!

Как бы предугадывая великие дела будущего Государя и его самоотвержение, поэт желал ему:

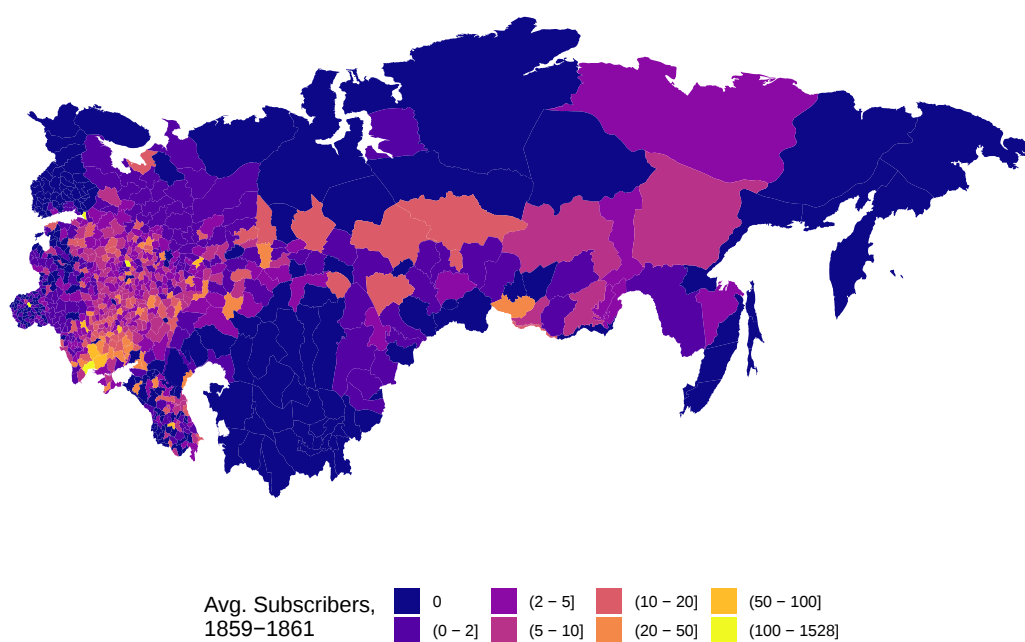
Жить для веков в величии народном,
Для блага всех свое позабывать.

25 ноября 1825 г. с кончиной Императора Александра I на Престоле вступил Великий князь Николай Павлович, а Великий князь Александр Николаевич был объявлен Наследником.
Воспитание и образование Наследника было поручено капитану Мерзлеру, Свиты Его Величества генерал-майору Кавелину и поэту В. А. Жуковскому. Под этим непрестанным, строгим и неуклонным наблюдением верных своему долгу людей протекала жизнь будущего Императора до 20-летнего возраста. Основанием к воспитанию и образованию легло твердое желание Августейшего Отца «воспитать в своем сыне человека, прежде чем сделать из него Государя», а «план учения», утвержденный Императором Николаем Павловичем, мог способствовать тому, чтобы из царственного ученика вышел не ученый, а просвещенный человек. И действительно, к концу назначенного для учения срока семена добра и правды, твердости характера и рыцарского взгляда, любви к ближнему, к «малым сим» и глубокое сознание долга и ответственности перед Богом за будущее царствование над могучим русским народом, — эти семена упали на добрую почву ясного и здравого ума Наследника.
Сопровождая отца в путешествиях по государству, а также проехав по всей России в 1837 г. со специальной целью пополнить свое книжное образование и воспитание наглядным изучением раз-



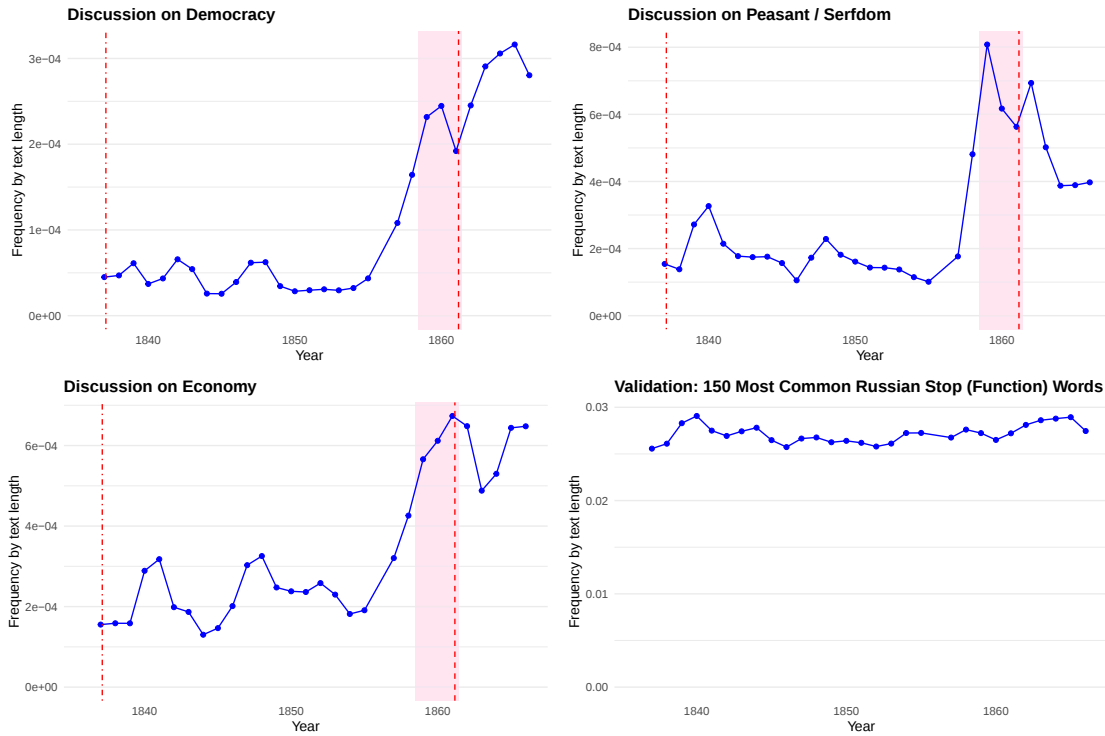
Notes: This picture is an excerpt from the article in 'The Book of Russian Sorrow,' dedicated to the assassination of Alexander II. The article, at its beginning, contains information on the place and date of his death.

FIGURE III: The Average Number of Subscriptions on “Sovremennik” Magazine, 1859-61



Notes: This map illustrates the geographic distribution of the number of subscribers to ‘Sovremennik’ in the Russian Empire, averaged between 1859, 1860, and 1861. The variation is shown at the district (uezd) level.

FIGURE IV: Results of text analysis of the Sovremennik corpus



Notes: This figure illustrates our text analysis of the Sovremennik corpus. Each panel shows the evolution of the frequency of terms corresponding to the following topics: Democracy, Peasants/Serfdom, and Economy. Each dictionary consists of a combination of hand-selected terms, which were later enriched with the closest terms from a word embedding trained on the magazine corpus. The unit of observation is the year. Additionally, we present a validation exercise by plotting the distribution of the 150 most common functional words in the Russian language over the observation period. We also present two vertical lines corresponding to two significant events. The first, a dot-dashed line, indicates the death of Alexander Pushkin, the founder of Sovremennik. The second, a dashed line, marks the abolition of serfdom in 1861.

TABLE I
MAGAZINE SUBSCRIPTIONS AND VIOLENCE AGAINST THE STATE

	OLS		2SLS, second stage	
	(1)	(2)	(3)	(4)
<i>Panel A. OLS and second-stage results</i>				
	At least one attack			
Number of subscribers, average 1859-61, log	0.0962*** (0.0102)	0.0805*** (0.0120)	0.1816*** (0.0465)	0.1711* (0.0873)
<i>Controls</i>				
Geographic controls	Yes	Yes	Yes	Yes
Share of serfs		Yes		Yes
Writers born pre-treatment, log		Yes		Yes
Population density (1858), log		Yes		Yes
<i>Fixed-effects</i>				
Province FEs	Yes	Yes	Yes	Yes
Observations	828	828	828	828
Mean of dependent variable	0.28	0.28	0.28	0.28
<i>Panel B. First-stage results</i>				
	Number of subscribers, log			
Number of Pushkin contacts, log			0.2817*** (0.0392)	0.1590*** (0.0352)
<i>Controls</i>				
Geographic controls			Yes	Yes
Share of serfs				Yes
Writers born pre-treatment, log				Yes
Population density (1858), log				Yes
<i>Fixed-effects</i>				
Province FEs			Yes	Yes
F statistics (Kleibergen-Paap)			51.634	20.462
Observations			828	828

Notes: The 2SLS estimation assesses the effect of the logarithm of magazine subscriptions (plus 0.1), averaged between 1859 and 1861, instrumented by the logarithm of the count of Pushkin encounters (plus 0.1), on a dummy variable for at least one act of political violence against imperial officials. Panel A shows OLS estimates (columns 1 and 2) and 2SLS second-stage estimates (columns 3 and 4). Panel B presents the first stage. Each specification includes province-level fixed effects. We introduce two sets of controls, which are used in odd and even columns respectively. In the first minimal group, we control for geographic variables, such as distances to Moscow and Saint Petersburg, and linear controls for latitude and longitude. In the second set of controls, we employ, along with geographic controls, the shares of serfs, the logarithm of the number of writers born before the *Sovremennik* launch, and the logarithm of population density in 1858. We report the Kleibergen-Paap rk Wald F statistic. Standard errors (in parentheses) are clustered at the province level. ***, 0.01, **, 0.05, *, 0.1

TABLE II
IV ROBUSTNESS: "ONE-OFF" ENCOUNTERS

	Baseline IV		"One-off" Encounters IV	
	(1)	(2)	(3)	(4)
<i>Panel A. 2SLS second-stage results</i>				
	At least one attack			
Number of subscribers, average 1859-61, log	0.1816*** (0.0465)	0.1711* (0.0873)	0.1831*** (0.0487)	0.1788** (0.0875)
<i>Controls</i>				
Geographic controls	Yes	Yes	Yes	Yes
Share of serfs		Yes		Yes
Writers born pre-treatment, log		Yes		Yes
Population density (1858), log		Yes		Yes
<i>Fixed-effects</i>				
Province FEs	Yes	Yes	Yes	Yes
Observations	828	828	828	828
Mean of dependent variable	0.28	0.28	0.28	0.28
<i>Panel B. First-stage results</i>				
	Number of subscribers, log			
Number of Pushkin contacts, log	0.2817*** (0.0392)	0.1590*** (0.0352)		
Number of Pushkin contacts, log "one-off" encounters			0.3052*** (0.0509)	0.1785*** (0.0439)
<i>Controls</i>				
Geographic controls	Yes	Yes	Yes	Yes
Share of serfs		Yes		Yes
Writers born pre-treatment, log		Yes		Yes
Population density (1858), log		Yes		Yes
<i>Fixed-effects</i>				
Province FEs			Yes	Yes
F statistics (Kleibergen-Paap)	51.634	20.462	35.956	16.514
Observations	828	828	828	828

Notes: The 2SLS estimation assesses the effect of the logarithm of magazine subscriptions (plus 0.1), averaged between 1859 and 1861, instrumented by the logarithm of the count of Pushkin encounters (plus 0.1), on a dummy variable for at least one act of political violence against imperial officials. Along with our baseline instrumental variable, we present an alternative one, where we focus exclusively on 'One-off' encounters — those with a short article length, below the median size, in our source book (Chereiskii, 1988). Panel A shows the 2SLS second-stage estimates. Columns 1 and 2 use the baseline instrument. Columns 3 and 4 present the results with the 'One-off' encounters as the instrumental variable. Panel B presents the first stage. We use the same set of controls as in the Table 1. We report the Kleibergen-Paap rk Wald F statistic. Standard errors (in parentheses) are clustered at the province level. ***: 0.01, **: 0.05, *: 0.1

TABLE III
MAGAZINE SUBSCRIPTIONS AND FUTURE HUMAN CAPITAL

	OLS (1)	2SLS (2)	OLS (3)	2SLS (4)	OLS (5)	2SLS (6)
	Literacy		Total district number of schools per 1000, 1894		Total number of schools per 1000, 1911	
Number of subscribers, average 1859-61, log	-0.0026 (0.4457)	-0.2291 (2.052)	-0.0156* (0.0090)	-0.0383 (0.0470)	-0.0007 (0.0216)	0.1100 (0.1209)
<i>Controls</i>						
Geographic controls	Yes	Yes	Yes	Yes	Yes	Yes
Share of serfs	Yes	Yes	Yes	Yes	Yes	Yes
Writers born pre-treatment, log	Yes	Yes	Yes	Yes	Yes	Yes
Population density (1858), log	Yes	Yes	Yes	Yes	Yes	Yes
<i>Fixed-effects</i>						
Province FEs	Yes	Yes	Yes	Yes	Yes	Yes
F statistics (Kleibergen-Paap)		11.691		11.691		11.467
Observations	490	490	490	490	486	486

Notes: The 2SLS estimation assesses the effect of the logarithm of magazine subscriptions (plus 0.1), averaged between 1859 and 1861, instrumented by the logarithm of the count of Pushkin encounters (plus 0.1), on various human capital outcomes. Odd and even columns present OLS and 2SLS estimates, respectively. In columns 1 and 2, the outcome variable is the literacy level in 1897. In columns 3 and 4, the outcome variable is the number of schools in districts in 1894, and in columns 5 and 6, it is the number of schools in 1911. We employ the full set of controls in the same manner as in Table 1. We report the Kleibergen-Paap rk Wald F statistic. Standard errors (in parentheses) are clustered at the province level. ***: 0.01, **: 0.05, *: 0.1

TABLE IV
MAGAZINE SUBSCRIPTIONS AND NUMBER OF FUTURE WRITERS BORN

<i>2SLS, second stage</i>	(1)	(2)	(3)	(4)
	Number of writers from Russian Empire, log			
<i>Cutoffs:</i>	Born after 1856	Born after 1866	Born after 1876	Born after 1886
Number of subscribers, average 1859-61, log	0.9647*** (0.3220)	0.9520*** (0.3286)	0.9639*** (0.3545)	0.9332*** (0.3440)
<i>Controls</i>				
Geographic controls	Yes	Yes	Yes	Yes
Share of serfs	Yes	Yes	Yes	Yes
Writers born pre-treatment, log	Yes	Yes	Yes	Yes
Population density (1858), log	Yes	Yes	Yes	Yes
<i>Fixed-effects</i>				
Province FEs	Yes	Yes	Yes	Yes
F statistics (Kleibergen-Paap)	20.462	20.462	20.462	20.462
Observations	828	828	828	828

Notes: The 2SLS estimation assesses the effect of the logarithm of magazine subscriptions (plus 0.1), averaged between 1859 and 1861, instrumented by the logarithm of the count of Pushkin encounters (plus 0.1), on the logarithm of the number of writers born in each district. All columns report 2SLS estimates. For columns 1-4, the outcome variables represent the number of writers born after 1856, 1866, 1876, and 1888, respectively, and before 1917. We employ the full set of controls in the same way as in Table 1. We report the Kleibergen-Paap rk Wald F statistic. Standard errors (in parentheses) are clustered at the province level. ***: 0.01, **: 0.05, *: 0.1

I

Online Appendix A

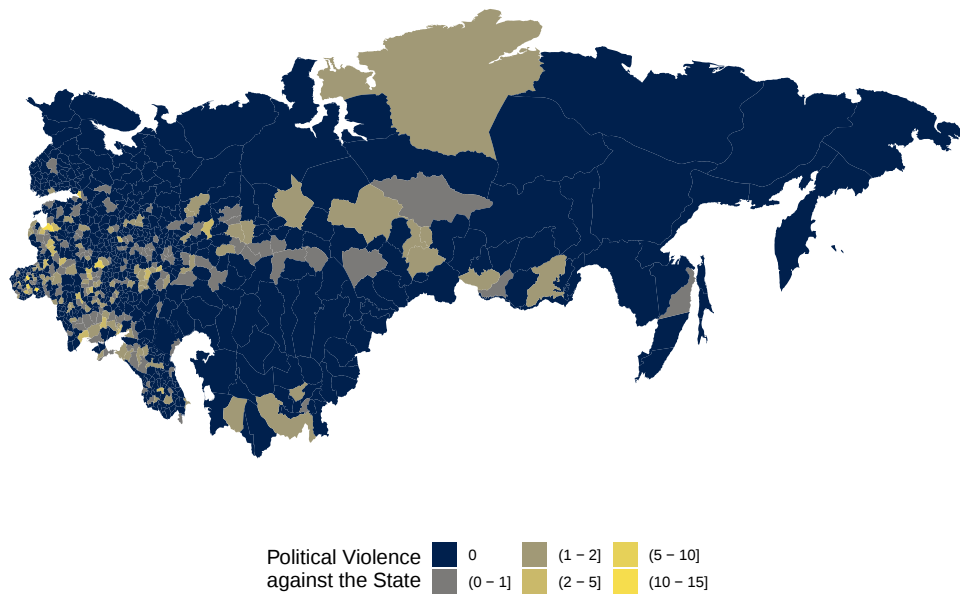
ADDITIONAL FIGURES AND TABLES

FIGURE A.1: Political Violence: Photograph of an Attack with Explosives



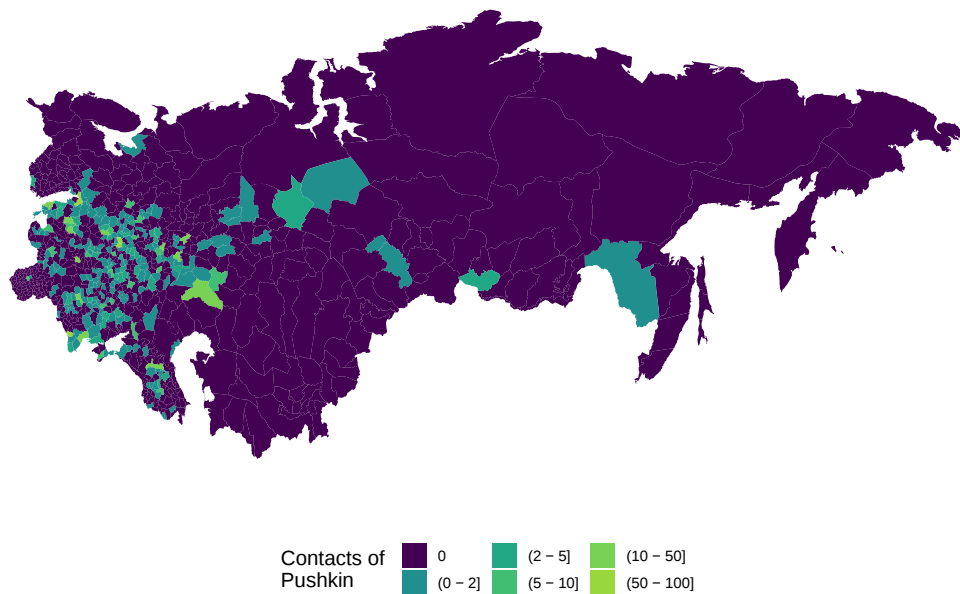
Notes: Scene following the 'failed' assassination attempt on Stolypin in 1906, an attack that resulted in 27 fatalities

FIGURE A.2: The Number of Violent Attacks against the State



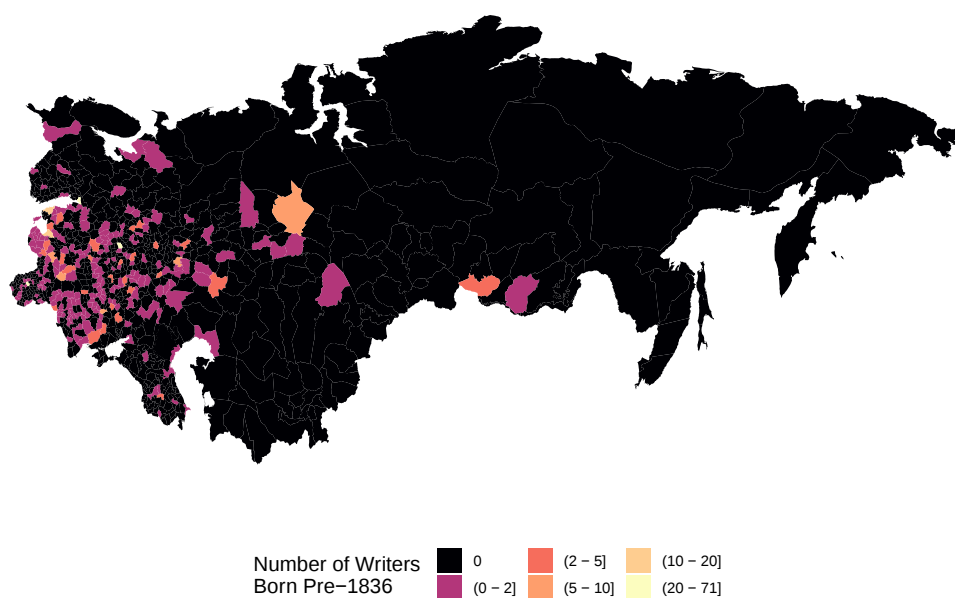
Notes: This map illustrates the geographic distribution of the number of violent attacks against the state in the Russian Empire, based on data extracted from 'The Book of Russian Sorrow'. The variation is depicted at the district (uezd) level.

FIGURE A.3: Pushkin Circle: Places of Birth/Living of People who Ever Met Pushkin



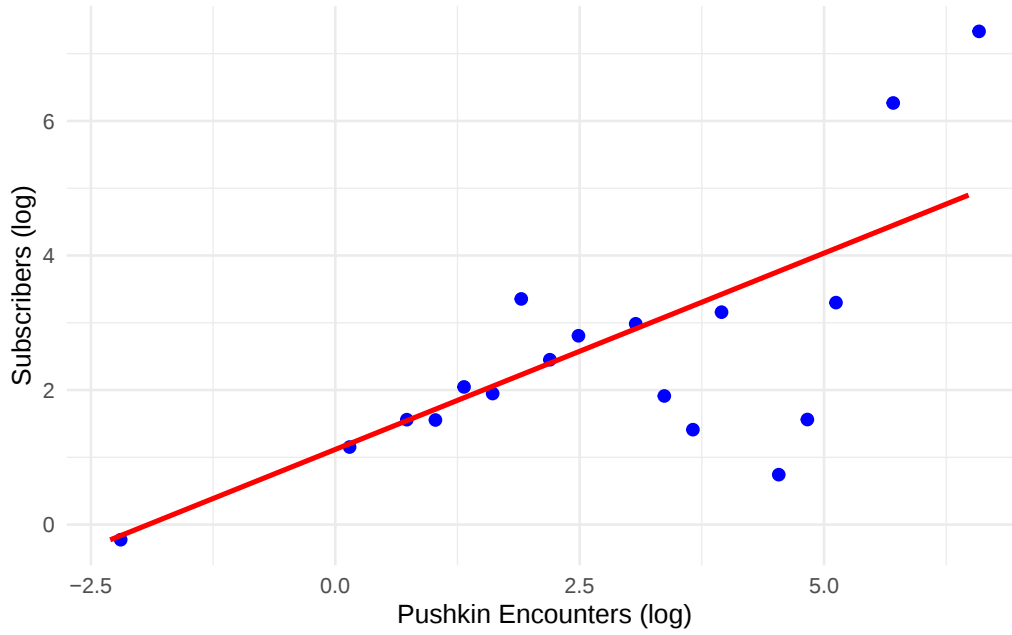
Notes: This map illustrates the distribution of approximately 2,500 encounters with Alexander Pushkin, aggregated by district (uezd) level. The geolocation of individuals is determined based on the following priority: we assign the individual's place of birth if available; if not, the place of residence is used; and if neither is available, the location of the encounter with Alexander Pushkin is utilized

FIGURE A.4: Distribution of Writers Born in Russian Empire before “Sovremennik” (1836)



Notes: This map illustrates the distribution of writers born in the Russian Empire before the launch of *Sovremennik*, based on data from Wikidata. The distribution is aggregated at the district (uezd) level.

FIGURE A.5: First-stage Binned Scatter Plots



(A) All Pushkin Encounters



(B) Pushkin "One-off" Encounters

Notes: These figures present a binned scatter plot and linear fit illustrating the relationship used in our first-stage analysis: between the logarithm of the average number of subscribers between 1859 and 1861 (plus 0.1) and our instrumental variables based on Pushkin encounters. We present two versions of the instrumental variable. In Panel A, the instrumental variable is calculated as the logarithm of all Pushkin encounters (plus 0.1). In Panel B, we focus exclusively on 'One-off' encounters — those with a short article length, below the median size, in our source book ([Chereiskii, 1988](#)). For the 'One-off' instrument, we also use the logarithm of the encounter count (plus 0.1).