

APPROPRIATION AND SUBVERSION

Precommunist Literacy, Communist Party Saturation, and Postcommunist Democratic Outcomes

By TOMILA V. LANKINA, ALEXANDER LIBMAN, and ANASTASSIA OBYDENKOVA*

INTRODUCTION

TWENTY-FIVE years after the collapse of communism in Europe, few scholars disagree that the past—increasingly conceptualized in terms of both precommunist and communist histories—continues to shape the democratic trajectories of postcommunist states.¹ One simple message that emerges from recent theorizing about postcommunist Europe’s “multiple pasts” is that we ought to distinguish between the good and the bad legacies—also described as “assets” and “liabilities.”² Certain precommunist legacies have arguably persisted through the communist

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¹ LaPorte and Lussier 2011; Ekiert and Ziblatt 2013; Pop-Eleches and Tucker 2013a; Pop-Eleches and Tucker 2013b; Kotkin and Beissinger 2014.

² Kotkin and Beissinger 2014.

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experience into the present, facilitated or dampened resistance to communism, or been absorbed to varying degrees depending on communism's affinity with precommunist orders.³

Precommunist literacy and schooling have featured prominently in this literature's good, or asset-type, bundle of legacies. States with legacies of comparatively advanced literacy and schooling are said to have been most resistant to the antidemocratic influences of communism. Conversely, not only were formerly backward areas ostensibly more likely to regard communism in a positive light, but their record of underdeveloped precommunist schooling also stunted the growth of democratic societal institutions and values. Furthermore, one could argue that where schooling had been rudimentary, minority ethnic groups in the imperial borderlands had not had extensive exposure to national myths antithetical to communism.⁴

We propose a different mechanism, one that challenges the linearity of the above assumptions and that is based instead on an analysis of the effect of precommunist literacy on Communist Party recruitment in Russia. Rather than regarding precommunist education as a source of latent resistance to communism, we highlight how the Bolsheviks managed, to the contrary, to appropriate the better-educated strata. As a result, we argue, these processes helped subvert the past democratic edge of the comparatively developed areas. This "reversal of fortune"⁵ type of argument is supported by substantial scholarship by Sovietologists pointing to the party's preference for selecting a literate cadre, to the overrepresentation of party members in sophisticated centers of learning and culture, and to the development of a vested interest in the Soviet system among the nomenklatura.⁶ To make our case, we first explore patterns of covariance between tsarist-era literacy and postcommunist democratic variations in Russia's subnational regions (stage 1) and between regional precommunist education and Communist Party saturation (stage 2). Based on the results of the above analysis, we pursue mediation analysis to distinguish between the direct and indirect (through party saturation) effects of precommunist literacy on postcommunist democratic outcomes (stage 3). Our linear regression analysis of author-assembled statistics from imperial Russia's first census (1897) supports prior research: precommunist literacy indeed has a strong positive association with postcommunist democratic outcomes.

³ Kopstein 2003; Pop-Eleches and Tucker 2013b.

⁴ Darden and Grzymala-Busse 2006; Peisakhin 2013.

⁵ Acemoğlu, Johnson, and Robinson 2002.

⁶ Rigby 1968; Szelényi 1987; Wong 1996.

Yet analysis reveals that this effect is mediated by Communist Party saturation in Russia's regions. Generally, we find higher party saturation levels in the formerly more literate areas. Party saturation in turn has apparently had a dampening effect on the otherwise positive effects of precommunist education on postcommunist democracy.

Our findings have implications that go beyond postcommunist settings to theory building about other types of legacies that might explain long-term political regime trajectories. Specifically, our study highlights how in particular historical contexts education can enhance, rather than undermine, authoritarian tendencies and regime consolidation. Our argument is distinct from those that focus on the socialization component of schooling—and indoctrination—under authoritarian or totalitarian systems.⁷ Rather, it highlights how having a human capital advantage in politically fluid settings can facilitate social repositioning and (re)deployment in the service of a new regime. As Dankwart Rustow's discussion of the education credentials of many an enabler of a twentieth-century dictatorial system reminds us, education may not always covary straightforwardly with democratic political action.⁸ As such, our argument occupies a middle ground between rationalist and culturalist assumptions about human behavior while also adding nuance to the premises of classic modernization theorizing.⁹ The persistence of literacy's democratic effects over time highlights the element of stability in value reproduction, including in the reproduction of democratic values associated with modernization legacies. Yet, the *appropriation* dimension of our argument simultaneously notes the possibility of rational responses to shifting material (and symbolic) opportunities under a new—authoritarian—system and the concomitant processes of *subversion* of prior values and behavioral orientations. These insights in turn have implications for research on critical junctures.¹⁰ They highlight how the genesis of an entirely new order might lead to a swift modification of preferences and behaviors among the better-educated strata in ways that may not be explicable with reference to the modernization or cultural persistence strands of democracy theorizing.

Our article is structured as follows. First, we discuss the debates about the democratic effects of education legacies in postcommunist settings and outline our hypotheses. Second, we perform statistical analysis

⁷ Linz 2000; Pop-Eleches and Tucker 2013b.

⁸ Rustow 1966.

⁹ Almond and Verba 1963; Lipset 1959. For a discussion of the application of political culture approaches to the study of communist and postcommunist politics, see also Brown 2005; Obydenkova and Libman 2015a; Obydenkova and Libman 2015c.

¹⁰ Capoccia and Kelemen 2007; Ekiert and Ziblatt 2013.

of the impact of precommunist literacy on regional party saturation and the implications of these dynamics for regional democratic governance. We then further unpack the relevant mechanisms with a historical discussion of the links between education and Communist Party recruitment and of how these legacies might impinge on regional democracy. We also provide an illustrative case study of Ivanovo, a region that typifies the appropriation and subversion patterns identified in our study. The final section concludes with a discussion of the implications of our analysis for historical legacies scholarship.

DEBATES ON EDUCATION LEGACIES IN COMMUNIST STATES

We adopt Stephen Kotkin and Mark Beissinger's definition of legacy as "a durable causal relationship between past institutions and policies on subsequent practices and beliefs, long beyond the life of the regimes, institutions, and policies that gave birth to them." We concur that this causal relationship can emerge "often in new form and to new purpose" in situations of "a significant rupture . . . —an end to one order and the beginning of another—that the legacy is supposed to straddle."¹¹ The emphasis in these conceptualizations on the creation of new durable phenomena out of something from the past allows us to better capture some of the otherwise inexplicable postcommunist political outcomes than if we employed Jason Wittenberg's alternative influential conceptualization of legacy as an end result of an earlier "instantiation" of a similar phenomenon.¹² For instance, in our analysis, we are not simply tracing the links between precommunist education and variations in communist education across space, which are essentially the same broad phenomena. Rather, we uncover how precommunist literacy might have shaped and helped reproduce over time an entirely different phenomenon associated with an entirely new order—Communist Party recruitment. We also analyze how party saturation shaped regional democratic variations. Furthermore, by highlighting how an asset-type legacy might facilitate the reproduction of liability-type legacies, we also challenge alternative definitions that stress continuity and mutual reinforceability,¹³ rather than the complexity, mutability, or even the potential for mutual cancellation¹⁴ of distinct types of legacies.

¹¹ Kotkin and Beissinger 2014, 7–8.

¹² Wittenberg 2012.

¹³ Janos 1994; Ekiert and Ziblatt 2013.

¹⁴ Kotkin and Beissinger 2014.

Our objective is to investigate the role of two interdependent sets of legacies—(1) the legacy of precommunist literacy and (2) Communist Party saturation—in accounting for regional postcommunist democratic variations. Accordingly, our analysis covers patterns of intertemporal reproduction, redeployment, and appropriation of human capital and of the reproduction of values, practices, and behaviors that straddle two sets of “ruptures,”¹⁵ or critical junctures:¹⁶ (1) the rupture with the tsarist order after the Bolshevik Revolution in 1917 and (2) the break with the communist order when the Soviet Union disintegrated in 1991.

We distinguish between two bodies of scholarship relevant to the debates on education legacies in postcommunist states. The first set of studies focuses on communist education and its effects on democratic values. This scholarship encompasses the earlier paradigmatic debates between modernizers¹⁷ and proponents of the *homo sovieticus* argument.¹⁸ Those paradigm wars¹⁹ were concerned with the question of whether *communist* education would, and whether it did, in 1989–91, lead to the collapse of communism—as classic modernization theorists would predict²⁰—or, alternatively, whether it helped nurture antidemocratic values. As such, these debates had little to say about *precommunist* learning and its relevance to the communist project.

The second, more recent group of studies is less temporally “shallow,”²¹ in that it broadens the scope of analysis to include precommunist education legacies. Much of this scholarship has been limited to highlighting general continuities between precommunist modernization and postcommunist developmental and regime divergences.²² The notable exceptions to the broad historical discussions about the *longue durée* of education in postcommunist Europe are the recent agenda-setting studies by Keith Darden and Anna Grzymala-Busse, Grigore Pop-Eleches and Joshua Tucker, and Leonid Peisakhin.²³ These works specifically analyze how precommunist education might have shaped receptivity or resistance to the communist project. We therefore discuss them at some length.

¹⁵ Kotkin and Beissinger 2014.

¹⁶ Capoccia and Kelemen 2007.

¹⁷ Lipset and Dobson 1972; Parkin 1972; Hahn 1991.

¹⁸ Siniavsky 1988; Jowitt 1992.

¹⁹ Gerber 2000b.

²⁰ Lerner 1958; Lipset 1959; Almond and Verba 1963; Rustow 1970; Inkeles 1983.

²¹ Kitschelt 2003.

²² Janos 2000.

²³ Darden and Grzymala-Busse 2006; Pop-Eleches and Tucker 2013b; Peisakhin 2013.

Darden and Grzymala-Busse argue that precommunist schools in Austria's imperial borderlands nurtured mass nationalist orientations antithetical to communism. By contrast, schooling in the Russian Empire had been less developed and more focused on inculcating Russian nationalist values. This arguably explains the weaker democratic proclivities in territories formerly ruled by the Russian Empire. Literacy statistics are employed in the study to proxy for schooling. Peisakhin advances a similar argument, analyzing democratic and nationalist value orientations among Ukrainian communities in formerly Austrian Galicia and in imperial Russian Volhynia and Podolia. Peisakhin's work is grounded in established theorizing on the socialization component of education.²⁴ He argues that in formerly Austrian areas, school teachers, along with family members and community leaders, may have continued to nurture values antithetical to communism that they had absorbed via the educational institutions of the past order. In formerly Russian domains, particularly in Podolia, which became part of communist Ukraine in the 1920s (Galicia and Volhynia came under Polish rule in the interwar period), by contrast, the communists arguably confronted more malleable citizens, ones who had likely enjoyed only rudimentary schooling prior to communist rule. And they had been subjected to imperial curricula intolerant of the ethnic minorities' nascent conceptions of nationhood. While the above studies focus more narrowly on education as an incubator of nationalist and, by extension, anticommunist sentiment, Pop-Eleches and Tucker are generally concerned with the democratic implications of socialization in schools. The three bodies of research also hint that a more straightforward modernization mechanism might be simultaneously at work, even though they eschew framing it as such. For example, an argument is made that "citizens of countries with robust interwar democracies and high levels of pre-communist literacy and economic development were much more resistant to adopting anti-democratic values in response to communist socialization efforts."²⁵ Irrespective of the particular lens through which the situation is viewed, these studies share an emphasis on imperial education as a driver of resistance to communism.

The above work has done much to sensitize us to the wider macro-structural modernization legacies that may have persisted through the communist period, as well as to illuminate the microsocietal and socialization processes of value transmission through education. We acknowledge our intellectual debt to this research. Nonetheless, we find

²⁴ Bourdieu and Passeron 1990; Breen and Jonsson 2005.

²⁵ Pop-Eleches and Tucker 2013b, 28.

the logic of the above theorizing wanting in light of the historical evidence on the overrepresentation of the better-educated strata, not only among the revolutionary vanguard but also among the party's rank and file.²⁶ Prior research additionally tells us that many party members could trace their lineage to the better-educated groups of the precommunist orders. These observations apply both to states at the bottom end of precommunist modernization like Russia, and to those at its top end like Hungary.²⁷

To what extent are the influences of the better-educated strata on the installation and consolidation of communist rule reflected in recent comparative scholarship? Darden and Grzymala-Busse's study investigates the democracy-inducing potential of precommunist mass education. It does not systematically explore how education shaped recruitment into the Communist Party, which, as discussed in the historical section of this article, had come to embody the Soviet elite.²⁸ Pop-Eleches and Tucker likewise focus on mass value orientations. They discuss the interaction between precommunist education and exposure to socialization in Leninist regimes in terms of the dampening effects of imperial education on the potentially democracy-corrosive influences of communism.

Peisakhin's research, by contrast, features the educated village elite as key reproducers of anticommunist values. Yet it also hints at the ambivalence inherent in the disjuncture between popular preferences and the political positioning of the better-educated strata in the new communist order. The study is particularly relevant for our theory in those cases where communism was an external imposition rather than a homegrown phenomenon. This is an important distinction that qualifies the scope of our argument. We address it in greater detail in the concluding section of the article. Peisakhin surveys select communities in the Polish territories annexed to Ukraine in 1939 and those incorporated into the USSR in the 1920s. To begin with, he finds a high degree of continuity in the reproduction of the better-educated imperial-era community leaders in that they continued to occupy positions of influence in the localities of communist Ukraine. That the elites survived the "institutional watershed" of the imposition of communist rule is a significant finding, given what we know about communist arrests, executions, and targeted exile of regime opponents. Clearly, there had been some degree of collaboration with the regime, but the ambiva-

²⁶ Jowitt 1992; Fitzpatrick 1993.

²⁷ Rigby 1968; Wong 1996.

²⁸ But see Grzymala-Busse 2002.

lence is not fully resolved in Peisakhin's study. Thus we find that while among those surveyed in Podolia, 73 percent of respondents joined the party's youth wing, the Komsomol, 33 and 44 percent of respondents joined it in Galicia and Volhynia, respectively. These are substantial numbers given the strength of anticommunist orientations in the latter two communities. While 41 percent of Podolians in the localities surveyed in the study admitted to having been genuinely motivated by a "belief" in communism, no Galician opted for that answer, and only 6 percent of Volhynians answered it in the affirmative. The discrepancy between the share of true believers in communism and those who actually joined the Komsomol indicates that motivations for political advancement under the communist order were clearly also present among a significant stratum of even the most avowedly anticommunist societies. Accordingly, while community elite "policing" of adherence to patriotic anticommunist values is likely to have been at work, a significant proportion of the educated village strata may simultaneously have served as enablers of communist rule.

Our appropriation and subversion theory addresses these notable gaps and ambiguities in the recent research. We accept that in ethnic minority borderlands, past literacy might have nurtured nationalist—and pro-democratic—sentiments. Because we observe the literacy-democracy link even among the overwhelmingly ethnically Russian oblasts, we conjecture that a straightforward modernization mechanism may also account for variations in postcommunist regime outcomes. Nevertheless, we simultaneously observe that the more literate areas supplied greater numbers of party recruits. This is why we have labeled the first part of our causal argument appropriation. Prior scholarship suggests that party membership may have helped nurture sentiments antithetical to democracy.²⁹ We also know that former ruling party members and their descendants have continued to enjoy access to power in many postcommunist settings.³⁰ Rather than serving as forces of latent resistance to communism, the better-educated individuals, once appropriated by the new regime, may have paradoxically facilitated the subversion of democracy in the hitherto more developed areas—our second causal claim. We therefore advance the following hypotheses:

—H1. Precommunist literacy will have a positive effect on postcommunist democracy in Russia's regions.

²⁹ McAllister and White 1995; Geishecker and Haisken-DeNew 2004.

³⁰ Hanley, Yershova, and Anderson 1995; Hanson 1995; Kryshatanovskaya and White 1996; Bird, Frick, and Wagner 1998; Hanley 1999; Gerber 2000a; Gerber 2003; Grzymala-Busse 2002; Geishecker and Haisken-DeNew 2004; Matonyte 2009.

—H2. Precommunist literacy will be positively associated with regional Communist Party saturation (*appropriation*).

—H3. Regional party saturation will mediate the effects of precommunist literacy on postcommunist democracy (*subversion*).

Figure 1 provides a visual illustration of the hypothesized mechanisms.

To test our hypotheses, we employ the subnational comparative method.³¹ Our units of observation are the constituent regions of the Russian Federation. Russia's territories possess variable precommunist historical legacies of literacy development and, generally, modernization. They encompass regions populated by minority ethnic groups like the Volga Germans with their record of cultural autonomy, advanced schooling, and superior levels of literacy predating communism; regions populated by groups that had been overwhelmingly illiterate in the imperial period; sophisticated centers of culture and commerce like St. Petersburg; and Black Earth hamlets, where serfdom survived in all but name decades after peasant emancipation.³² The experiences of regional development under communism also varied.³³ We also observe substantial regional variations on our key outcome variable, postcommunist democracy.³⁴

Our within-nation research design allows us to augment earlier analyses of legacies in postcommunist states. Scholars have identified the small-N problem as a significant challenge when performing cross-national analyses of variations in postcommunist political regimes. Working with only twenty-eight or so observations places constraints on how many variables can be simultaneously included in a model. This in turn introduces the possibility of omitted variable bias.³⁵ The “legacy family” issue presents another methodological challenge. Certain good legacies tend to go together—as would be the case with schooling, experience of democratic governance or generally, modernization in Austro-Hungarian territories. Given the bundled nature of legacies, it becomes difficult to disentangle the effect of education from that of other variables when national-level data are employed.

Our analysis goes some way toward addressing these issues. First,

³¹ Snyder 2001. See also Lankina and Getachew 2012; Lankina and Getachew 2013; Obydenkova 2011; Obydenkova 2012; Obydenkova and Libman 2015b.

³² Koch 1977; Leonard 2011.

³³ Moses 1981; Libman and Obydenkova 2014; Obydenkova and Libman 2013.

³⁴ McMann and Petrov 2000; Lankina 2004; Lankina and Getachew 2006; Lankina and Getachew 2008; Obydenkova 2008; Obydenkova and Libman 2012; Obydenkova 2012; Obydenkova and Libman 2015b.

³⁵ Darden and Grzymala-Busse 2006; Pop-Eleches 2007.

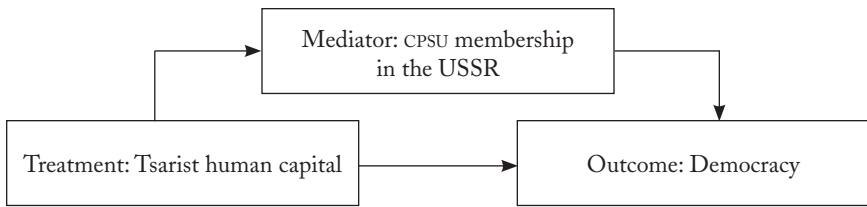


FIGURE 1

PRECOMMUNIST AND COMMUNIST LEGACIES AND DEMOCRATIC VARIATIONS

we are able to work with seventy-seven observations corresponding to Russia's regions.³⁶ Second, by analyzing territories in the legacy family of tsarist domains, we are better able to isolate the effect of particular sublegacies, such as literacy, on regional governance. Other than Kaliningrad and Tyva, our seventy-seven regions have formed part of tsarist Russia and the Russian Soviet Federative Socialist Republic (RSFSR) from the 1920s onward. Subnational analysis of one country allows us to hold constant the effects of national-level variables like temporal exposure to communist rule and over-time shifts in the nature of ruling regimes.³⁷

We describe our methods, variables, and data, and present the results of the statistical analysis, below.

STATISTICAL ANALYSIS

MEDIATION AND MODERATION

We identify two main hypothetical types of relationships between imperial education and party saturation: moderation and mediation. Reuben Baron and David Kenny distinguish between these two types of effects as follows.³⁸ Let us assume that the research objective is to investigate how a predictor variable X affects the outcome variable Y (here X is precommunist education and Y is postcommunist democracy). A moderator variable Z is a third variable, which affects the direction or strength of the effect of X on Y (in political science scholarship, moderation is typically modeled employing interaction terms). A mediator variable Z is a variable that represents the “generative

³⁶ A discussion of matching tsarist *gubernii* (regions) and postcommunist regions is provided in Lankina, Libman, and Obydenkova 2015, S1.

³⁷ Jowitt 1992; Pop-Eleches and Tucker 2013b.

³⁸ Baron and Kenny 1986.

mechanism”³⁹ through which X affects Y. “Whereas moderator variables specify when certain effects will hold, mediators speak to how or why such effects occur.”⁴⁰ A mediator variable should therefore satisfy at least two criteria: the level of Z should be determined by the level of X, and the level of Y should be determined by the level of Z. If one blocks the causal path between X and Y through Z, the effect of X on Y could become insignificant. It is possible, however, that there is a remaining effect of X on Y (direct effect), which does not go through Z (it may go through other mediators, as well). In moderator situations, there is no link between X and Z.⁴¹

In our analysis, the variable Z is Soviet-era party saturation. The theoretical discussion in the previous section suggests the appropriateness of applying the concept of mediation rather than moderation. We argue that the communist regime *typically* appropriated the better-educated strata, leading to higher levels of party saturation in regions with comparatively high levels of precommunist literacy. This would imply that the size of regional party organizations would correspond to preexisting education levels in the regions. Hence, precommunist education affected postcommunist democracy both directly (through persistent cultural legacies) and indirectly (because it caused party saturation in these regions to be higher and, as a result created a different—hypothetically negative—impact of the Communist Party of the Soviet Union [CPSU] legacy on subnational democracy). Moderation models are, from a theoretical standpoint, unsuitable for us. These models would imply that regions with similar precommunist literacy levels should exhibit different levels of postcommunist democracy because of differences in party saturation. But they would fail to take account of the fact that, consistent with our theory, there is likely to be modest variation in party saturation in regions with similar literacy levels because CPSU saturation would have been influenced by precommunist education levels. In addition to the conceptual rationale, there is also an empirical rationale dictating our choice of mediation models. Baron and Kenny suggest employing mediation analysis when a strong relationship exists between the predictor and outcome X and Y and that the alternative form of analysis, moderation, is appropriate for dealing with inconsistencies in relationships between these

³⁹ Baron and Kenny 1986, 1173.

⁴⁰ Baron and Kenny 1986, 1176.

⁴¹ In fact, interaction term models may be problematic due to multicollinearity if the predictor and moderator are highly correlated.

variables.⁴² As shown below, in our study the relationship between the two variables is strong and consistent.

Empirically, to validate the mediation mechanism, we need, first, to demonstrate that *X* influences *Z*—that is, controlling for plausible alternative explanations, party saturation is predicted by precommunist education. Second, we need to demonstrate that there is a *ceteris paribus* effect of *Z* on *Y*—that is, controlling for plausible alternative explanations, party saturation levels allow us to predict the level of postcommunist regional democracy. Third, we need to demonstrate that controlling for *Z*, the effect of *X* on *Y* changes in magnitude.

Generally speaking, mediation analysis could be pursued employing three equations. The first model regresses the outcome variable *Y* on the predictor variable *X* and on the mediator *Z*, as well as on appropriate controls. The second model regresses the mediator *Z* on the predictor variable *X*. The third model regresses *Y* on *X*, but not on *Z*. Intuitively, combined with the first model, the third regression would demonstrate how the inclusion of *Z* in a set of controls changes the coefficient of *X*. The objective of mediation analysis is to obtain the estimates of three quantities. The indirect, or mediation, effect measures the part of the effect of *X* on *Y* that is going through *Z*—that is, how change in *Z*, caused by change in *X*, affects *Y*. The direct effect measures the “remaining” portion of the effect of *X* on *Y*, which is not going through *Z*. The total effect is the full effect of *X* on *Y* through all possible pathways—that is, through *Z* and not through *Z*. Intuitively, mediation analysis decomposes the total effect into direct and indirect effects.⁴³

Baron and Kenny offered an early approach to estimating three quantities of interest for cases of a continuous mediator and outcome. Recently, Kosuke Imai and various colleagues developed a general algorithm allowing the estimation of mediation effects for different types of mediators, outcomes, and models⁴⁴ and implemented it in R.⁴⁵ Raymond Hicks and Dustin Tingley provided the Stata code for this algorithm.⁴⁶ Early approaches to mediation analysis typically relied on multiplication of slope coefficients of the individual models described above and the evaluation of their statistical significance. These approaches suffered from two limitations: they were not

⁴² Baron and Kenny 1986.

⁴³ For a discussion of recent applications of this method, see MacKinnon, Fairchild, and Fritz 2007; MacKinnon, Coxo, and Baraldi 2012; Pearl 2012.

⁴⁴ Imai, Keele, and Tingley 2010; Imai, Keele, and Yamamoto 2010; Imai et al. 2011.

⁴⁵ Tingley et al. 2014.

⁴⁶ Hicks and Tingley 2011.

applicable to nonlinear models (this is less important for us, given our focus on continuous predictor and mediator variables); and they were not appropriate for sensitivity analysis due to the sequential ignorability assumption.⁴⁷ The approach of Imai and colleagues solves these two problems. Technically, it first estimates the mediation analysis models described above for the observed values of the mediator and outcome variables; it then repeatedly simulates model parameters from their sampling distribution. And for each draw of parameters (we apply one thousand draws), it simulates the potential values of the mediator and of the outcome, and computes the quantities of interest.⁴⁸

We employ both the Hicks and Tingley and the Imai et al. codes to ensure that the choice of statistical software does not affect our results. The estimation of a mediation effect relies on the sequential ignorability assumption; in case there is a continuous mediator and continuous outcome variables Z and Y , as in our study, this assumption is violated if the error terms in the first and second models described above are correlated. This assumption cannot be tested from the data, so it is advisable to perform sensitivity analysis showing how the results would change depending on the extent of correlation of error terms. Our research implements the appropriate sensitivity analysis.⁴⁹

DATA AND MEASURES

Our measure of precommunist education is population share of literates (*literacy*) in the regions (*gubernii*) of tsarist Russia. We obtained these data from the first imperial census, held in 1897.⁵⁰ Literacy is the most straightforward measure of precommunist education absent systematic data on primary, secondary, and tertiary schooling. Literacy also tends to covary with urbanization, another measure of precommunist modernization for which data are readily available.⁵¹ Regional literacy varies in the range of 4 to 62 percent.

To capture regional party saturation, we employ the measure of the share of Communist Party members in proportion to regional adult population in 1976 (*party saturation*).⁵² Party saturation is in the range

⁴⁷ Sequential ignorability assumption means that “(a) conditional on the observed pretreatment covariates, the treatment is independent of all potential values of the outcome and mediating variables, and (b) the observed mediator is independent of all potential outcomes given the observed treatment and pretreatment covariate”; Imai, Keele, and Tingley 2010, 310.

⁴⁸ Hicks and Tingley 2011.

⁴⁹ Lankina, Libman, and Obydenkova 2015, S2.

⁵⁰ Troynitskiy 1905.

⁵¹ Lankina 2012.

⁵² While party membership and regional population data are available for 1976, adult population data are available only for 1979 (the most proximate year). For reliability purposes, we compute the

of 5 to 15 percent of regional adult population. We obtained these data from official publications of the CPSU. Prior research indicates that after 1976, regional levels of party saturation remained fairly constant.⁵³

To capture our key outcome variable, *democracy*, we employ the indices developed by Nikolay Petrov and Alexei Titkov, experts on Russia's regions formerly affiliated with the Russia-based think tank, the Carnegie Moscow Center.⁵⁴ The indices are based on expert assessments of regional democracy along ten dimensions and employing a five-point scale; the values of these dimensions are then added up to provide a composite index. The lowest democracy score has the value of seventeen and the highest has a value of forty-five. Further detail on the index is provided in the supplementary material.⁵⁵ We employ the moving average democracy measure for the years 2000–2004, thereby allowing for sufficient temporal distance from the collapse of the USSR in 1991. This period also precedes Vladimir Putin's re-centralization drive, which served to homogenize regional political landscapes while stopping short of obliterating democratic institutions in the more open regions.⁵⁶ Earlier data for 1991–2001 are also employed and confirm that our results hold. Conceptually, the democracy score builds on the notion of “liberal democracy,” which encompasses both its procedural and its substantive aspects.⁵⁷

MODELS AND RESULTS

Based on the logic of mediation analysis, we employ a three-step procedure. First, to test H1, we regress *democracy* on *literacy*, *party saturation*, and a set of relevant covariates. We also run the regression without the party saturation variable. Our objective in this first stage is to explore how education legacies influence contemporary variations in democracy. In the language of mediation analysis, we regress (1) the outcome *Y* on predictor *X* and mediator *Z*, as well as on the appropriate controls, and (2) the outcome variable on the predictor and on the appropriate controls. We thereby ascertain whether the predictor and mediator have any effect on the outcome and whether the effect of the predictor changes if the mediator is included in a set of covariates.

share of party members in the regional population as a whole employing 1976 data. The general results do not change.

⁵³ Obydenkova and Libman 2014; Libman and Obydenkova 2015. For regions that had been split into several entities in the 1990s, we assign party membership values from the original RSFSR region. We perform a robustness check to ensure that this does not significantly affect our results.

⁵⁴ Petrov 2005.

⁵⁵ Lankina, Libman, and Obydenkova 2015, S3.

⁵⁶ Reisinger and Moraski 2009.

⁵⁷ Bollen 1993.

Next, we test H2 to ascertain whether imperial education shaped regional party saturation. Therefore, in the second stage of our analysis, we employ *party saturation* as our dependent variable. Our key right-hand variable of interest in these regressions is *literacy*. The control variables capture other contemporaneous influences on the supply-and-demand aspects of party saturation. In the language of mediation analysis, we regress the mediator Z on the predictor X . This is also a crucial stage for ascertaining whether the moderator or the mediator model is more appropriate for our analysis. Should we find significant correlation between Z and X , we can be confident that the mediation model, which we regard as more appropriate given our conceptual framework, is also appropriate vis-à-vis the data analysis.

The third stage of our analysis tests H3. At this stage we compute the direct, the indirect, and the total effects employing the procedures described above, and we perform sensitivity analysis. Thus, at this stage we perform the mediation analysis, while in stages 1 and 2 we justify the applicability of the approach. The important empirical questions for us are whether the total effect of *literacy* on *democracy* remains significant and positive once we incorporate the mediating influence of *party saturation*, and how large the decline of the total effect is once *party saturation* is taken into account.

In the first stage of our analysis we employ all regions for which data are available and exclude those with missing data, such as Chechnya and the administratively low-ranked autonomous *okrugs*.⁵⁸ We also exclude Tyva and Kaliningrad, which had not been part of the Russian Empire at the time of the 1897 census. In the second stage, we exclude all autonomous oblasts and okrugs for which data are not available. We employ the same set of regions in our third step, since in the mediation analysis the samples in the regressions predicting the mediator and the final outcome variables should be identical.

Table 1 reports the findings from the first stage of analysis. Data for all control variables, except for data on the main explanatory variables discussed above—*literacy*, *party saturation*, and *democracy*—are obtained either from the official Russian state statistics service, Rosstat (and averaged over 2000–2004), or from the 2002 Russian State Census. The summary statistics for all the variables can be found in the supplementary material.⁵⁹

⁵⁸ Lower-level constituent units of the Russian Federation, okrugs are subordinated to other units such as oblast or *krai*. Typically they are ethnic regions populated by Siberian or Northern peoples.

⁵⁹ Lankina, Libman, and Obydenkova 2015, S4.

TABLE 1
DETERMINANTS OF SUBNATIONAL DEMOCRACY, ORDINARY LEAST SQUARES

	(1)	(2)	(3)	(4) ^a	(5)	(6)	(7)	(8) ^a
Democracy indicator period	2000–2004	2000–2004	2000–2004	1991–2001	2000–2004	2000–2004	2000–2004	1991–2001
Party saturation, 1970s					–2.428*** (0.691)	–2.385*** (0.673)	–2.587*** (0.695)	–2.679*** (0.649)
Literacy, 1897	0.134* (0.073)	0.130* (0.073)	0.166** (0.079)	0.169** (0.081)	0.309*** (0.070)	0.307*** (0.070)	0.347*** (0.074)	0.370*** (0.079)
Education, 2002	0.027 (0.254)	0.019 (0.263)	–0.131 (0.291)	0.078 (0.269)	0.130 (0.209)	0.130 (0.205)	–0.0004 (0.239)	0.153 (0.206)
Income, 2000–2004	0.321 (0.496)	0.293 (0.511)	0.387 (0.611)	–0.0001 (0.001)	0.758* (0.414)	0.758* (0.407)	0.844 (0.510)	0.001 (0.001)
Share of ethnic Russians, 2002	0.142** (0.054)	0.108*** (0.033)		0.179*** (0.051)	0.124** (0.054)	0.133*** (0.032)		0.155*** (0.052)
Dummy republic	2.174 (2.848)		–3.821* (1.927)	4.114 (2.569)	–0.638 (2.784)		–5.994*** (1.764)	0.929 (2.484)
Distance from Moscow	–0.196 (0.208)	–0.216 (0.209)	–0.300 (0.209)	–0.143 (0.217)	–0.267 (0.220)	–0.261 (0.215)	–0.362 (0.219)	–0.221 (0.225)
Log oil and gas extraction, 2000–2004 (measured in coal equivalent)	1.122** (0.506)	1.067** (0.508)	0.800 (0.551)	0.999** (0.497)	0.352 (0.529)	0.381 (0.510)	0.024 (0.553)	0.116 (0.497)
Constant	12.994* (6.687)	16.541*** (5.214)	27.811*** (3.518)	8.160 (6.786)	29.167*** (7.919)	27.921*** (5.822)	43.008*** (5.327)	26.769*** (7.824)
Observations	77	77	77	77	77	77	77	77
R-squared	0.324	0.317	0.245	0.344	0.459	0.458	0.399	0.506

Robust standard errors in parentheses; * significant at 10% level, ** significant at 5% level, *** significant at 1% level
^a In specifications 4 and 8, oil and gas extraction and income are for 1995–2001.

We employ a number of control variables. We include measures of income per capita and education as proxies for postcommunist regional development; these may covary with democracy.⁶⁰ To account for regional ethnic variation, we include the measure of the share of ethnic Russians as a proportion of regional population; we also employ a dummy variable that takes the value of one if a region has the status of republic and zero otherwise. Prior research indicates that ethnically defined republics and “Russian” regions with oblast status containing large ethnic minority populations tend to fare worse in regional democracy assessments than do nonethnically defined regions with smaller concentrations of ethnic minority populations.⁶¹ Because

⁶⁰ Furman 1999. We employ the population share of university graduates, since in Russia secondary schooling is mandatory, as our education measure.

⁶¹ Gel'man 1999; Hale 2007.

of the hypothesized links between resource dependence and regime variations, we also incorporate the measure of total volume of regional oil and gas extraction,⁶² and we take the logarithm of this value plus one (to keep regions with zero oil and gas extraction in our sample) to reduce the impact of outliers. Finally, we control for geographic distance in kilometers between regional capitals and Moscow. This variable captures possible variations in the intensity of federal control over distant territories, as well as the heterogeneity of regional population preferences, which could also have an impact on regional politics.

Table 1 presents the results for the first set of (eight) regressions. The first four models include only *literacy*; that is, they regress the outcome *Y* on the predictor *X*. The next four models include both the *literacy* and *party saturation* variables (regression of *Y* on *X* and *Z*). In each set of the four models, the first model is the baseline; the second and the third models drop either the *republic* or the *Russians* variables to deal with possible multicollinearity; and the fourth model replaces the 2000–2004 *democracy* with the 1991–2001 democracy measure.⁶³

The results for our key variables are consistent across the various specifications. Regions with legacies of comparatively advanced literacy have significantly higher democracy scores. When we exclude *party saturation*, an increase of 1 percentage point in *literacy* increases *democracy* values by 0.15 points on average. When we include *party saturation*, a 1 percentage point increase in *literacy* results in an over 0.3 point increase in *democracy*. Thus, in line with the mediation assumption, controlling for *party saturation* consistently changes the effect of *literacy*. In fact, in line with our reasoning, if we block the path from precommunist education to postcommunist democracy through party saturation (by controlling for this variable), we obtain a larger *ceteris paribus* effect of precommunist literacy. The effects for the 1990s are almost identical to those for the 2000s. We also find that *party saturation* has a significant negative effect on *democracy*. A 1 percentage point increase in party membership has the effect of a reduction in the regional democracy score of 2.5 points. We perform additional robustness checks and obtain similar results.⁶⁴

In the second stage of our analysis, we test for the effects of *literacy* on *party saturation*. Control variables capturing additional factors potentially affecting the supply-and-demand side of party membership in the 1970s are also included. Specifically, we control for population

⁶² Ross 2001.

⁶³ Unlike the 2000–2004 score, the 1991–2001 score was constructed retrospectively, in the early 2000s.

⁶⁴ Lankina, Libman, and Obydenkova 2015, S5.

size and urbanization; larger urbanized regions might have been prioritized in national planning while also being desirable places of residence.⁶⁵ We also include a dummy variable for regions located on the USSR's external borders. Strategically important frontier regions tended to house military bases, with many career military officers residing in those areas. Prior research indicates that joining the CPSU was particularly straightforward for military personnel.⁶⁶ We also include a dummy variable that takes the value of one for regions with ethnic groups that suffered repression and resettlement under Stalin, and zero otherwise.⁶⁷ The record of repression may have limited the demand for party membership, and the Soviet leadership might have also discriminated against repressed groups when reviewing membership applications.⁶⁸ We also employ alternative operationalizations of the legacy of repressions.⁶⁹ Because low party membership was generally characteristic of ethnic minorities, we include a control variable of population share of ethnic Russians in 1979. Considering that regional income, which might serve as a proxy for overall well-being, might covary with career choices and progression,⁷⁰ it is also important for us to capture the effects of this variable. Unfortunately, Soviet statistical compilations did not report regional income data. And although they provide information on average salaries, in a planned economy monetary salary constitutes an imperfect proxy of well-being. A large proportion of revenue was redistributed in material form, such as privileged access to consumer goods and services. We include a control for 1975 income in one of the specifications. In another model we employ the best available proxy for Soviet-era well-being: infant mortality in 1970.⁷¹ As part of our robustness checks, other indicators of well-being are employed, as well.⁷² We also control for communist education using the measure of share of population with university degrees in 1979. Including this variable allows us to disentangle the effects of precommunist and communist education legacies. Communist and precommunist education may covary, so we exclude communist education in model 2. The results are reported in Table 2.

⁶⁵ Rigby 1968. But see Marks 2004.

⁶⁶ Harris 1986. Active servicemen are not included, since they were not listed in regional party organizations; data on deployment of Soviet troops are not available.

⁶⁷ Ingushetia, Kalmykia, Kabardino-Balkaria, and Karachaevo-Cherkessia.

⁶⁸ Jones and Grupp 1984; Pohl 2000.

⁶⁹ Lankina, Libman, and Obydenkova 2015, S5.

⁷⁰ Millar 1992.

⁷¹ Hicks and Streeten 1979.

⁷² Lankina, Libman, and Obydenkova 2015, S5.

TABLE 2
DETERMINANTS OF PARTY SATURATION (CPSU MEMBERSHIP IN PROPORTION
TO REGIONAL POPULATION) IN THE 1970s, ORDINARY LEAST SQUARES

	(1)	(2)	(3)	(4)
Literacy, 1897	0.084*** (0.019)	0.111*** (0.023)	0.081*** (0.018)	0.075*** (0.019)
Population, 1977	-0.0003*** (0.0001)	-0.0002 (0.0002)	-0.0003*** (0.0001)	-0.0003*** (0.0001)
Urbanization, 1977	-0.018 (0.013)	0.005 (0.012)	-0.009 (0.014)	-0.027** (0.012)
Border region (USSR)	-0.263 (0.362)	-0.030 (0.368)	-0.130 (0.371)	-0.284 (0.334)
Repressed by Stalin	-1.160 (0.720)	-0.736 (0.765)	-1.290** (0.609)	-0.416 (0.722)
Infant mortality, 1970	-0.032 (0.025)	-0.013 (0.030)		0.005 (0.028)
Education, 1979	0.327*** (0.111)		0.341*** (0.116)	0.375*** (0.103)
Monthly salary, 1975			-0.004 (0.004)	
Share of ethnic Russians, 1979				0.024*** (0.006)
Constant	7.219*** (0.980)	6.408*** (1.293)	6.540*** (0.729)	4.889*** (1.108)
Observations	71	71	71	71
R-squared	0.613	0.515	0.613	0.670

Robust standard errors in parentheses; * significant at 10% level, ** significant at 5% level, *** significant at 1% level

The results indicate a statistically significant positive correlation between *literacy* and *party saturation*, confirming the presence of the hypothesized *appropriation* mechanism. A 1 percentage point increase in the share of literates in the late nineteenth century leads to an increase in party saturation of 0.075–0.110 percentage points. These results are robust to additional checks.⁷³ We also find urbanization to be associated with lower *party saturation* in one of the models, but only after we include the communist education variable in the regressions. Larger population size is also associated with lower party saturation levels. Repressions have a negative and significant effect in one of the specifications. We also find that “Russian” oblasts had on average high party saturation levels. The key finding from these regressions is that

⁷³ Lankina, Libman, and Obydenkova 2015, S5.

precommunist literacy has a significant positive effect on party saturation—that is, X is a significant predictor of Z .

In the third stage of our analysis (mediation), *literacy*, as noted above, is employed as a treatment, *party saturation* as the mediator, and *democracy* as the outcome variable. While estimating the regressions, we use the same control variables as in specification 1 of Tables 1 and 2. For the estimated direct effect, the total effect, and the mediation effect, we report the 95 percent confidence intervals to establish the significance of the results. Table 3 provides the results for the aggregated democracy score. The mediation effect is, as expected, negative and equal to -0.211 ; the direct effect is positive and equal to 0.336 . Both effects are significant at the 5 percent level. Thus, *literacy* has a positive direct effect and a negative indirect effect going through the mechanism of *party saturation*, on *democracy*. The total effect is the sum of these two effects; it is not significantly different from zero. This is in line with H3. We find a large, positive, and significant direct effect of precommunist literacy on regional democracy. This result, however, is almost entirely offset by the large, negative, and significant effect of communist legacies of party saturation. Specifically, a 1 percentage point increase in *literacy* in the baseline specification reduces *democracy* by 0.21 points through an indirect effect—that is, through *party saturation*—while simultaneously increasing *democracy* by 0.34 points through a direct positive effect. Our findings are robust to most of the alternative specifications,⁷⁴ thereby confirming the hypothesized *appropriation and subversion* mechanism accounting for regional democratic variations. We also show that outliers have no impact on our results⁷⁵ and that they hold when individual components of the democracy index are employed.⁷⁶

To add further nuance to our analysis, we created a typology of regions corresponding to the hypothesized appropriation and subversion patterns and of those that deviate from the “norm” and therefore warrant additional tests to ascertain what variables might account for these “anomalous” patterns (see Figure 2). Type 1 and 2 regions are representative of the appropriation patterns uncovered in this study, namely, the covariance between literacy and party saturation. Type 1 regions, featuring high literacy and high party saturation, include the developed Central Russia and Volga basin territories such as Ryazan, Samara, and Saratov, as well as the Far Eastern territories of Khabarovsk and

⁷⁴ Lankina, Libman, and Obydenkova 2015, S5.

⁷⁵ Lankina, Libman, and Obydenkova 2015, S6.

⁷⁶ Lankina, Libman, and Obydenkova 2015, S7.

TABLE 3
MEDIATION ANALYSIS, 2000–2004

<i>Dependent Variable</i>	<i>Effect</i>	<i>Mean</i>	<i>95% Confidence Interval</i>	
Democracy	ACME ^a	−0.211	−0.368	−0.087
	direct effect	0.336	0.200	0.468
	total effect	0.125	−0.033	0.278

^aACME stands for average causal mediation effect.

Primorskiy. The type 2 regions, featuring comparatively low literacy and low party saturation, encompass the less developed Central Russia and Volga basin territories, as well as several “ethnic” republics. Of our seventy-seven regions, sixty—the vast majority—belong to these two types (for a visual representation of this pattern, see the supplementary material).⁷⁷

Type 3 and 4 regions do not correspond to the general pattern uncovered in our study: some high literacy regions feature comparatively low party saturation (type 3), while some regions with comparatively low literacy are characterized by relatively high levels of party saturation (type 4). Examples of the very few regions corresponding to type 3 are Karelia and Nizhniy Novgorod. Type 4 features rural Black Earth regions and several Central Russian provinces. Note that in the low literacy type 2 and 4 regions, higher levels of party saturation appear to suppress democracy ratings even further than what we would expect if we looked solely at these regions’ imperial literacy statistics. A comparison of outcomes in type 1 and 3 regions also indicates that greater party saturation appears to negatively affect democratic performance in regions with comparatively high levels of imperial literacy. As such, the anomalous cases corroborate the hypothesized negative effects of party saturation on democracy—the subversion part of our argument. We also perform supplementary analysis (1) to further ascertain factors accounting for deviations from expected party saturation levels,⁷⁸ and (2) to establish whether in “deviating” regions, party membership may also *moderate* (in what would be different from a *mediating* effect) past literacy legacies.⁷⁹

⁷⁷ Lankina, Libman, and Obydenkova 2015, S8.

⁷⁸ Lankina, Libman, and Obydenkova 2015, S9.

⁷⁹ Lankina, Libman, and Obydenkova 2015, S10.

<p style="text-align: center;">Type 1</p> <p style="text-align: center;">High Literacy High CPSU Member Saturation</p> <p>Average democracy score: 30.2 Average literacy: 29.3 Average party saturation: 9.9 Number of regions: 25</p> <p>Examples: Ryazan, Saratov, Samara, Tula, Tver, Vladimir, Volgograd, Yaroslav, Rostov, Novgorod, Ivanovo, Kostroma, Kamchatka, Khabarovsk, Primorskiy</p>	<p style="text-align: center;">Type 2</p> <p style="text-align: center;">Low Literacy Low CPSU Member Saturation</p> <p>Average democracy score: 27.7 Average literacy: 14.1 Average party saturation: 7.1 Number of regions: 35</p> <p>Examples: Astrakhan, Bashkortostan, Belgorod, Krasnodar, Irkutsk</p>
<p style="text-align: center;">Type 3</p> <p style="text-align: center;">High Literacy Low CPSU Member Saturation</p> <p>Average democracy score: 36.8 Average literacy: 22.5 Average party saturation: 7.6 Number of regions: 6</p> <p>Examples: Arkhangelsk, Karelia, Komi, Chelyabinsk, Nizhniy Novgorod</p>	<p style="text-align: center;">Type 4</p> <p style="text-align: center;">Low Literacy High CPSU Member Saturation</p> <p>Average democracy score: 26.6 Average literacy: 16.4 Average party saturation: 9.0 Number of regions: 11</p> <p>Examples: Kaluga, Kursk, Orel, Penza, Pskov, Smolensk, Tambov, Ulyanovsk, Vologda, Voronezh</p>

FIGURE 2
EXAMPLES OF REGIONS WITH DISTINCT COMBINATIONS OF PRECOMMUNIST AND
COMMUNIST LEGACIES AND THEIR DEMOCRACY SCORE^a

^a Cutoff values are 8.35 percent for party saturation and 20.00 percent for literacy (that is, the means of both variables).

HISTORICAL DISCUSSION: APPROPRIATION AND SUBVERSION UNPACKED

What are the precise causal mechanisms accounting for the observed appropriation and subversion patterns? How can we explain the apparent intertemporal reproduction of past human capital effects in Russia's regions, given the known record of postrevolutionary exodus of

the intelligentsia; the class-based witch hunt against the nonproletarian cadres; and the Stalinist purges? And how do we account for the apparently detrimental implications of party saturation for regional democracy? To address these questions, we provide a historical discussion of the role of education in the Bolsheviks' recruitment strategies and of the mechanisms linking party saturation and poor regional democratic performance. This account is supplemented in the next section with an illustrative case study of Ivanovo, a region typifying the appropriation and subversion patterns.

The link between education and party recruitment became evident early on, from the very first days of Bolshevik rule, and it persisted, becoming more pronounced over time.⁸⁰ It is well known that the Revolution led to an exodus of the highly educated upper echelons of tsarist society. Nevertheless, many privileged families remained in Russia, as did scores of literate upwardly mobile citizens of the lower estates. Modernization scholarship⁸¹ would lead us to expect the relatively enlightened strata that remained in Russia after 1917 to become the pillars of a future democratic society. This expectation is supported when we look at regional voting results during Imperial Russia's haphazard experiments with parliamentary democracy in 1906–17. The electoral records indicate that the more literate gubernii tended to elect parliamentarians from the party that best represented a democratic choice—the Constitutional Democratic Party (*kadety*).⁸² Why, then, did the comparatively well-educated strata flock to the Bolshevik Party after 1917? Admittedly, many among the service professionals and intelligentsia, not to mention the nobility, deplored the new regime. Nevertheless, substantial numbers from among even the more privileged groups were genuinely drawn to the Bolsheviks' socially progressive, “modern” message.⁸³ Large numbers of middle-class professionals—in a sentiment epitomized in Boris Pasternak's novel *Doctor Zhivago*—were simply eager to get on with normal lives in the country that they loved and that desperately needed their skills. For many, including the upwardly mobile peasants in the “bourgeois” occupations, party membership had come to represent survival and a way to instrumentally conceal tarnished pasts.⁸⁴ Soviet archives from the 1920s are replete with records of passport fraud, appeals against “bourgeois”

⁸⁰ Witt 1961; Rigby 1968; Fitzpatrick 1993.

⁸¹ Lipset 1959.

⁸² Ivanov, Komzolova, and Ryakhovskaya 2008.

⁸³ Haimson 1988; Balzer 1996.

⁸⁴ Fitzpatrick 1993, 755.

social labeling, and efforts to acquire temporary status as factory workers—to earn income and achieve social mobility and basic dignity under the Leninist regime.⁸⁵

What did it mean to have a comparative educational advantage in postrevolutionary Russia? How did the party members' educational credentials compare to those of the society at large? And to what extent did these credentials reflect prerevolutionary social stratification? On the eve of the Revolution, only 40 percent of the population over the age of eight was literate.⁸⁶ The 1926 census revealed that the number had increased to 50 percent. A 1911 survey showed that only 44.2 percent of the empire's children aged eight to eleven were enrolled in primary schools.⁸⁷ By contrast, in 1919 the level of illiteracy among party members was roughly 3 percent, with 92 percent having completed at least four years of formal schooling.⁸⁸ Although roughly 7 percent of party members had completed ten years of secondary schooling or higher education, "this was still some 20–30 times the percentage in the population at large."⁸⁹ As T. H. Rigby notes, the party "was [thus] an essentially literate organization functioning in a semiliterate society."⁹⁰

Not only was there a "significant correlation between literacy and party membership . . . , [but] both variables also correlate[ed] positively with a third—upward occupational mobility."⁹¹ Just prior to the Revolution, education credentials largely continued to mirror the eighteenth-century estates system of Peter the Great. The estates distinguished between peasants, townsmen (*meshchane*), nobility, clergy, merchants, the educated nonnobles (*raznochintsy*), and "others."⁹² The nobility and clergy estates predominated among those who had received secondary and postsecondary education. By contrast, the education of the peasant estate was patchy and largely limited to rural primary schooling. Nevertheless, Russia's nineteenth-century education reforms contributed to the gradual accumulation of peasant human capital and the move into white-collar occupations.⁹³ Clearly, the estates inadequately reflected the turn-of-the-century processes of

⁸⁵ Fitzpatrick 1979; Fitzpatrick 1993; Volkov 1999.

⁸⁶ In 1914. Rigby 1968, 400.

⁸⁷ Eklof 1986, 285.

⁸⁸ According to a 1919 survey. Rigby 1968, 401–3.

⁸⁹ According to a 1922 survey. Rigby 1990, 28.

⁹⁰ Rigby 1968, 400.

⁹¹ Rigby 1968, 404.

⁹² Rigby 1990, 36.

⁹³ Eklof 1986.

industrialization, urbanization, and social mobility.⁹⁴ Rigby's analysis of the prerevolutionary backgrounds of provincial Soviet officials provides some indication as to the estate origins of party members.⁹⁵ Nearly a quarter of the senior Soviet provincial officials in 1921 reportedly had occupied positions in the tsarist government or private bureaucracies and are therefore likely to have hailed from the relatively privileged estates. Another large category of new party recruits came from the lowest—peasant—estate. By 1914, however, these “peasant” recruits tended to have nonmanual jobs, such as “petty functionary,” “thus showing themselves to have been upwardly mobile already under the old order.”⁹⁶ (Additional data on party members' imperial backgrounds are presented in the supplementary material.)⁹⁷

There was apparently a systematic urban-rural dimension to the way in which imperial social and educational stratification was reproduced among party entrants. Depending on the level of administrative authority, both the tsarist professionals with secondary and higher education credentials and the literate upwardly mobile individuals of peasant origin with four years of primary schooling would have been advantaged in the process.⁹⁸ Our literacy statistics capture the *combined* size of these different strata. Georgi Derluguian notes that in some national republic centers, the “intellectual capital” through the decades of Soviet rule remained concentrated among “old families that could be traced back to the precommunist gentry, bourgeoisie, and intelligentsia.”⁹⁹ We also know that the imperial intellectual elite—often of noble origin—under the Bolshevik regime continued to staff prestigious academic institutions like the Russian Academy of Sciences in St. Petersburg.¹⁰⁰ Such a significant concentration of high-status imperial elites is unlikely to have been a feature of provincial capitals of the RSFSR's regions. In the early 1920s tsarist civil servants and those engaged in “middling” professions requiring at least secondary education of the meshchane or raznochintsy estates, such as teachers, doctors, journalists, or statisticians, were apparently advantaged in party recruitment in guberniya capitals. At the lower territorial level (*uezd*) of small towns and villages, the party tended to recruit larger numbers

⁹⁴ Haimson 1988; Fitzpatrick 1993; Balzer 1996.

⁹⁵ Rigby 1990, 36.

⁹⁶ Rigby 1990, 39.

⁹⁷ Lankina, Libman, and Obydenkova 2015, S11.

⁹⁸ Rigby 1990, 29, 37.

⁹⁹ Derluguian 2005, 148.

¹⁰⁰ Graham 1967.

of those listed in imperial censuses as “peasants.”¹⁰¹ As noted above, the peasant category often included the literate urban and rural white-collar stratum.

The skills of the privileged elite and professionals and of the literate middling strata of more humble origin were in high demand for the simple reason that the regime had set itself the goal of rapidly modernizing a backward, semiliterate country. Thus, the party’s recruitment of the latter, middling sort of upwardly mobile individuals is particularly important for our story. The Soviet regime claimed that in the 1920s and 1930s it had rapidly transformed the lowest social strata, including factory workers and illiterate peasants, into the “*new* soviet-trained intelligentsia”¹⁰² (as distinct from the *old* intelligentsia of noble or otherwise privileged origin). Over time, the simple criterion for assigning the intelligentsia label became *current* employment in a nonmanual job. It was often used interchangeably (and inconsistently) with *sluzhashchie* (officials, office workers), though “intelligentsia” tended to refer to writers, teachers, doctors, lawyers, statisticians, and technicians, whereas *sluzhashchie* tended to be applied to clerical workers.¹⁰³ To counter the claim that imperial human capital played no role in the Bolsheviks’ cultivation of the strata that would end up colonizing the CPSU, we unpack the process of the genesis of this new Soviet intelligentsia using the example of education policy. In their drive to bring education to the illiterate masses, the Bolsheviks faced significant challenges in finding suitably educated teachers to do the job. Scores of teacher training courses were set up to address the shortage of teachers and lecturers with appropriate qualifications. An analysis of teacher training in the Middle Volga gubernii in the 1920s reveals that these “red teachers” (*krasnye uchitelya*) were required to have at least a secondary education and some prior teaching experience.¹⁰⁴ In Penza, 31.1 percent of teachers—the largest category—possessed certificates from imperial gymnasia; others had been educated in teacher seminaries, religious schools, and tsarist secondary and vocational institutions.¹⁰⁵ While many of these teachers hailed from the privileged estates, others easily cleared the ideological hurdle of “humble” origins. By 1917 the provincial education sector was dominated by two estates: the meshchane and the peasants. Historically, it was typical for meshchane to pursue

¹⁰¹ Rigby 1990, 37.

¹⁰² Fainsod 1970, 268.

¹⁰³ Rigby 1990, 28, 31.

¹⁰⁴ Varlamenkov 2008, 352.

¹⁰⁵ Varlamenkov 2008, 352.

white-collar professions. In contrast, the peasants had been transitioning into nonmanual occupations as part of more recent, bottom-up modernization processes in the countryside. These processes, however, spanned several decades, beginning with the emancipation of the peasants in 1861.¹⁰⁶ What Soviet propaganda tended to obscure is that it is such representatives of the lower estates—largely trained for and socialized in white-collar occupations under the *old* regime—that would make the quick leap into the status of “*new* Soviet-trained intelligentsia.” But the regime could not create this “intelligentsia” from scratch, in a top-down fashion and virtually overnight, even if it had wanted to.

We observe substantial regional variations in the extent to which such opportunities for appropriation of both the would-be *new* and the *old* intelligentsia presented themselves to the Bolsheviks. By the end of the nineteenth century, certain gubernii in Central Russia, the Middle Volga, the Urals, and Western Siberia had become hubs of industry and manufacturing, spurring the movement of peasants to the cities. These processes also affected the supply-and-demand aspects of education.¹⁰⁷ Many peasants who became factory workers and white-collar clerks were eager to acquire the literacy and numeracy essential for success in the new economy; industry owners also had incentives to set up factory schools to increase labor productivity. Historically, in a trend that predates Russia’s industrialization, the provision of secondary schooling also varied. The Middle Volga cities of Saratov and Samara, for example, boasted prestigious gymnasia founded by German colonists who had settled in Russia in the eighteenth century.¹⁰⁸ Some gubernii also possessed universities like the Kazan Imperial University, the Samara Teacher Training Institute, and the Imperial Saratov University, founded in 1804, 1911, and 1909, respectively (and still in existence with somewhat modified names and structures). Not only did the Bolsheviks eagerly appropriate the infrastructure of these establishments, but they also relied on existing faculty to provide the instruction.¹⁰⁹ By contrast, party records from the less developed areas convey the Bolsheviks’ sense of desperation in finding cadres from among the culturally or otherwise backward groups with literacy rates in the single digits.¹¹⁰

Throughout the 1920s, and in particular toward the end of the decade, in 1928–29, the regime made active efforts to secure a more

¹⁰⁶ Eklof 1986, 190.

¹⁰⁷ Brooks 1985.

¹⁰⁸ Koch 1977.

¹⁰⁹ Varlamenkov 2008.

¹¹⁰ Martin 2001, 126; Rigby 1968.

robust representation in the party of those actually engaged in farm and factory labor. It did not take long, however, for the Bolsheviks to realize the adverse implications of the marginalization of skilled individuals engaged in nonmanual occupations for the fulfillment of the regime's ambitious developmental goals. Following the disappointing results of the First Five-Year Plan (1928–32), with its high labor turnover and low productivity, Stalin proclaimed: "No working class in history had managed without its own intelligentsia." Stalin's speech, part of a carefully orchestrated attack on "equality mongering," represented a turning point in the party's relaxation of class-based recruitment criteria.¹¹¹ To what extent did Stalin's subsequent purges put a brake on this recruitment of cadres who brought human capital advantages acquired during the tsarist order? In the supplementary material, we discuss recent historiography on the purges and the toll they took on party cadres and the wider society.¹¹² We also provide evidence of the reproduction of provincial educated cadres as the purges subsided.¹¹³ Supplementary statistical analysis incorporating the effects of the various rounds of repression against particular ethnic groups also confirms the robustness of our findings.¹¹⁴

Although we are able to establish patterns of reproduction of the imperial era's better-educated strata in the CPSU in the 1920s and 1930s, no comparable statistics on the prerevolutionary backgrounds of party recruits exist for later time periods; in the late 1930s party records started to feature exclusively Soviet class and occupational labels such as intelligentsia, worker, and *kolkhoznik* (collective farm worker).¹¹⁵ To better understand patterns of reproduction of human capital in party recruitment, we discuss the wider processes of intergenerational transmission of social and educational advantage in Soviet society. Most scholars accept that the Soviet modernization project succeeded in socially elevating large numbers of individuals of modest origin.¹¹⁶ Nevertheless, research on communist social stratification has found a greater degree of continuity in the intergenerational transmission of preference for higher education among white-collar strata than among manual workers. Thus, both in the USSR¹¹⁷ and in Hungary,¹¹⁸ children of manual

¹¹¹ Inkeles 1950, 465.

¹¹² Lankina, Libman, and Obydenkova 2015, S12.

¹¹³ In discussing the purges, we are mindful of Ian Lustick's plea for transparency and discernment in working with historical sources. Lustick 1996.

¹¹⁴ Lankina, Libman, and Obydenkova 2015, S5.

¹¹⁵ Witt 1961; Rigby 1968.

¹¹⁶ Fitzpatrick 1979; Volkov 1999.

¹¹⁷ Volkov 1999.

¹¹⁸ Róbert 1991.

workers elevated to white-collar status often reverted to “proletarian” occupations or became college dropouts, thus putting a brake on Soviet-engineered processes of social mobility. By contrast, those born to parents in white-collar occupations were far more likely to complete higher education.¹¹⁹ In 1921–30 in the Institute of Red Professors, the academy established to train ideologically robust cadres, most students—90 percent—ended up dropping out, with the majority of the dropouts having been commandeered from “peasant” and “proletarian” jobs. By contrast, students with “nonproletarian” backgrounds tended to persevere in completing their studies.¹²⁰ Alex Inkeles notes: “It is certainly not accidental that since 1938 the Soviet Union has not published statistics on the social composition of the student body in higher educational institutions, since at that time . . . it was already true that the children of the intelligentsia and employees constituted 47 percent of the student body although the group made up only some 17 percent of the total population.”¹²¹ Clearly, parental values help explain the intergenerational transmission of cultural capital much as they would in other contexts.¹²² State policy also shaped social mobility in ways that went against official ideology. In 1922, to stem the tide of peasants moving to the cities, the Bolsheviks instituted the *propiska* system of residential registration, thereby tying rural populations to collective farms.¹²³ The introduction in 1932 of a “social position” (worker, *kol-khoznik*) entry in passports served to further rigidify class distinctions in society.¹²⁴ In addition, the tuition fees instituted between 1940 and 1956 for secondary and higher education were prohibitive for many manual workers.¹²⁵

In turn, party membership helped reproduce education and status inequalities insofar as it conferred social advantages like access to good schools, elite holiday camps, and scarce material goods.¹²⁶ Rigby argues that the CPSU had come to embody the Soviet elite, though “an elite of a rather peculiar kind: one in which representation is ensured for all major segments of Soviet society . . . and at all levels of employment.”¹²⁷ Early on, however, we observe a form of “reciprocal representation

¹¹⁹ See also H. 1966; Parkin 1969; Lane 1973; Nove 1975.

¹²⁰ Kozlova 1997.

¹²¹ Inkeles 1950.

¹²² Bourdieu and Passeron 1990.

¹²³ Fuchs and Demko 1977; Leonard 2011.

¹²⁴ Fitzpatrick 1993.

¹²⁵ Witt 1961, 64.

¹²⁶ As in other communist states. Djilas 1983; Grzymala-Busse 2002, 53.

¹²⁷ Rigby 1968, 412.

between the CPSU membership and those categories of Soviet citizens who *prima facie* stand high with respect to prestige, remuneration or power.”¹²⁸ Thus, in 1959, “the chances of a white-collar worker [entering the party] were six or seven times as great”¹²⁹ as that of a collective farmer. We also know that father’s education and prestige of occupation positively correlated with party recruitment.¹³⁰

We now turn to unpacking the mechanisms accounting for the subversion patterns uncovered in our statistical analysis. As already noted, our party data encompass officials working in party and Soviet structures and “lay” members in various other occupations. Prior scholarship helps to illuminate how both of these sets of actors might have a bearing on regional democratic outcomes. Specifically, we distinguish between (1) *political elite and bureaucracy* effects of reproduction of communist-era leadership and street-level functionaries, and (2) *societal* effects of party saturation, specifically, those related to individual values and behavior.¹³¹

One simple way of conceptualizing the influence of party functionaries on governance is in terms of their know-how—their values and *modi operandi*. Prior research found a considerable degree of reproduction of party apparatchiks in postcommunist regional power structures, many of whom had begun their careers as early as the 1970s.¹³² As Gerald Easter discusses, Leonid Brezhnev’s stability of cadre policy from the 1960s onward ensured a high degree of regional bureaucratic continuity.¹³³ Joel Moses found that by the 1980s, those born in a particular region or those who had spent considerable time working there were much more likely to staff its regional party and Soviet bodies than non-natives.¹³⁴ The policy helped nurture entrenched cliques of regional bosses who used their positions to dole out patronage to supporters and penalize dissenters. These features of governance characteristic of many clientelistic settings¹³⁵ overlapped with the Soviet model of “democratic centralism” and the expectation of bureaucratic and societal compliance with top-down decision making. To use Grzymala-Busse’s apt term,

¹²⁸ Rigby 1968, 413.

¹²⁹ Rigby 1968, 413, 414, emphasis in the original.

¹³⁰ Also in other Warsaw Pact countries, though less so in Czechoslovakia. Wong 1996.

¹³¹ We also explore electoral dynamics as one potential channel of societal impact of party saturation on democratization but do not find evidence that party membership affected electoral behavior. Lankina, Libman, and Obydenkova 2015, S9.

¹³² Hanley, Yereshova, and Anderson 1995; Kryshtanovskaya and White 1996; Gel’man et al. 2003; ICSID 2014; Obydenkova and Libman 2014; Libman and Obydenkova 2015.

¹³³ Easter 2000, 169.

¹³⁴ Moses 1981, 86.

¹³⁵ Kitschelt and Wilkinson 2007; Hale 2015.

these are the kinds of “usable pasts” that regional party functionaries would apply to post-Soviet governance.¹³⁶ Mikhail Gorbachev’s perestroika may have generated nascent shoots of other potentially usable pasts—those of merit in recruitment, accommodation with civil society, and tolerance of dissent. Yet we also know that regional cliques were often successful at resisting Gorbachev’s attempts to break their power.¹³⁷ Another by-product of the reproduction of cadres in regional power structures is control over key regional resources. Regional functionaries were often trained in local institutes that prepared competent cadres for specific regional industries. They also frequently moved between regional party and Soviet work and managerial roles in local enterprises. In the post-Soviet period, these local bosses were excellently placed, not only to recolonize regional governments, but also—because of their industry know-how and contacts—to control the privatization of enterprises. Access to industry resources coupled with positions in regional governments would in turn facilitate the construction of powerful political machines.

Our second suggested causal mechanism linking party saturation to poor democratic outcomes relates to value orientations and behavior of lay members—those in the rank and file who may have pursued occupations unrelated to careers in the party apparat. As party ticket holders, however, they would have received greater exposure than nonmembers to routinized forms of political participation. In fact, activism in official youth groups like the Komsomol was a *sine qua non* for party admission. Further, public opinion surveys have shown that former party members are less likely than nonmembers to espouse democratic values.¹³⁸ Clearly, while many had to feign enthusiasm for communism to join the party and thereby secure a promotion, others appear to have actually internalized the regime values. Socialization in “compliant political activism”¹³⁹ is in turn likely to be among the societal pasts accounting for lack of civic activism in Russia’s less democratic regions.¹⁴⁰ Party saturation might also indirectly affect the viability and strength of autonomous organizations in society.¹⁴¹ In

¹³⁶ Grzymala-Busse 2002.

¹³⁷ Roeder 1991.

¹³⁸ Finifter and Mickiewicz 1992; Dalton 1994; Rohrschneider 1994; Bahry, Boaz, and Gordon 1997; Miller, Hesli, and Reisinger 1997. But see Gibson, Duch, and Tedin 1992; Mishler and Rose 1997; Letki 2004.

¹³⁹ Bahry and Silver 1990, 832. (As distinct from, say, “counterculture”-type activities. See Dalton 1994.)

¹⁴⁰ Gibson, Duch, and Tedin 1992; Jowitt 1992; Mishler and Rose 1997; Pop-Eleches and Tucker 2013a; Pop-Eleches and Tucker 2013b.

¹⁴¹ Pop-Eleches and Tucker 2013b.

regions with large numbers of party cadres, we would expect high levels of both self-policing and societal policing of *mezzo*-structures—for example, local community groups, trade unions, political parties, and religious organizations—that might articulate oppositional interests.¹⁴² Our statistical analysis in the supplementary material provides further support for the hypothesized bureaucracy and societal channels.¹⁴³

IVANOVO: A TYPICAL CASE

The Ivanovo region typifies the appropriation and subversion patterns uncovered in our study. As such, it further illuminates the mechanisms linking imperial literacy, party saturation, and democracy discussed above. Ivanovo is a small region northeast of Moscow on the Volga River, with a population of a little over one million.¹⁴⁴ In the imperial period, present-day Ivanovo had been part of the Ivanovo-Voznesenskiy Industrial District, which included Vladimir and Kostroma gubernii. The city of Ivanovo was established in 1871, when the village of Ivanovo, which specialized in textile artisanry, was merged with the textile industry town of Voznesensk. Because Ivanovo's soil conditions were not especially suitable for agriculture, many peasants there, as in other such regions, engaged in trades that facilitated the development of manufacturing and commerce. By the end of the nineteenth century, Ivanovo-Voznesensk became the "Manchester of Russia," famed for textile manufacturing. Industrialization went hand in hand with human capital development. The Vladimir guberniya, of which Ivanovo was part, featured among Russia's "leaders in primary education."¹⁴⁵ As in the other modernizing regions, the new bourgeoisie—epitomized by the Garelin dynasty of textile magnates—took pride in its civic activism and philanthropy (*metseenatstvo*). In 1847 Yakov Petrovich Garelin (1820–90) became mayor of Ivanovo-Voznesensk. In addition to opening a school for his factory workers, he founded a public library, a public hospital, a school for boys, and a gymnasium for girls.¹⁴⁶

The fate of two institutions—the gymnasium for girls, now a high school specializing in English-language instruction, and the Ivanovo Polytechnic Institute—illustrates the typical pattern of appropriation

¹⁴² Evans and Whitefield 1993.

¹⁴³ Lankina, Libman, and Obydenkova 2015, S13.

¹⁴⁴ McFaul and Petrov 1998, pt. 1. The census recorded a population of 1,061,651; see All-Russian Population Census, 2010. At http://www.gks.ru/free_doc/new_site/perepis2010/croc/perepis_itogi1612.htm, accessed September 24, 2015.

¹⁴⁵ Eklof 1986, 74.

¹⁴⁶ At <http://ivgazeta.ru/read/15851>, accessed April 27, 2015; see also Gruzdev 2011. At http://dic.academic.ru/dic.nsf/enc_biography/32050/Гарелин, accessed April 27, 2015.

and subversion that unfolded to a greater or lesser extent across Russia after the Bolsheviks took power. The curriculum of the gymnasium, founded in 1878, covered seven years of instruction, with a special, optional eighth grade for girls aspiring to become teachers. In 1918 the Bolsheviks turned the gymnasium into a coed school and retained the imperial teaching staff.¹⁴⁷ Some of the school's imperial-era female alumnae subsequently became prominent oblast party workers.¹⁴⁸ The regional party boss (1972–85) Vladimir Klyuev hailed from the school, as did one of the heads of the oblast administration in the 1990s, Adolf Laptev.¹⁴⁹ The Riga Polytechnic Institute, founded in 1862 and evacuated to Ivanovo during World War I, was another imperial institution appropriated by the Bolsheviks. In 1930 the Polytechnic's departments were expanded to establish the Agricultural, Chemistry, Textile, and Energy Institutes.¹⁵⁰ Among the institute's appropriated faculty was Vsevolod Keldysh, a noble. His son, Mstislav Keldysh, the feted Soviet academician, studied in the Ivanovo gymnasium.

The Bolsheviks built on Ivanovo's industrial heritage, turning it into a textile production center renowned across the USSR. Throughout the Soviet decades, the imperial educational establishments served as training platforms for local cadres who would then go on to work in Ivanovo's textile industries and party. Leading experts on Russia's regional politics have characterized Ivanovo's postcommunist development in terms of a strong degree of cadre, policy, and political continuity with the communist period. Ivanovo's *polnovlastnyy khozyain* (whole-scale owner) between 1972 and the onset of perestroika in 1985, a "tough party apparatchik of the old-fashioned mould," had been Vladimir Klyuev, a native of the region with strong ties to the textile industry.¹⁵¹ An outsider appointed to run the oblast in 1985 did not last very long, as he appeared "soft" and "moderate" as compared with his native predecessor. By 1990 Ivanovo was back in the hands of native nomenklatura elite who had cut their teeth as professionals and managers in the textile industry and party work. The pliant regional legislative council had come to be packed with industry directors—constituting some 50 percent of the deputy ranks in the mid-1990s. At the same time, 25 percent of the legislative council members had been heads

¹⁴⁷ Bobrovitskaya 2008.

¹⁴⁸ For instance, Olga Varentsova. At http://www.in3p.ru/showObject/record_70:outFull.html http://www.in3p.ru/showObject/record_70:outFull.html, accessed May 17, 2015; Kuznetsova 2006.

¹⁴⁹ On regional party leaders, see <http://www.cursiv.ru/?publication=16922>, accessed April 27, 2015.

¹⁵⁰ At <http://ivgpu.com/about-the-university/>, accessed April 27, 2015.

¹⁵¹ McFaul and Petrov 1998, pt. 1, 520.

of local administrations.¹⁵² Even against the background of national-level democratic politics of the early 1990s, Ivanovo continued to feature communist-era functionaries at the helm of power. For instance, Governor Vladislav Tikhomirov had previously served as chairman and first secretary of the oblast's party executive committee.¹⁵³ In 2000 Tikhomirov was succeeded by another regional insider, Vladimir Tikhonov, formerly a high-ranking party functionary and manager of one of Ivanovo's largest textile enterprises, Shuyskie sitsy. Tikhonov was among the few regional bosses bold enough to protest President Vladimir Putin's policy of appointing governors in the mid-2000s. So entrenched was Tikhonov's power that—in a case covered in the national press—federal security service officers and the police were allegedly involved in forcing his eventual resignation on grounds of corruption while he was undergoing treatment for a medical injury in a hospital.¹⁵⁴

In the postcommunist period, Ivanovo's entrenched networks of party officials, who had made their careers moving between positions as enterprise managers and district- and regional-level party bureau chiefs, turned into effective political machines. Former communist bosses continued to maintain Soviet-era styles of centralized decision making, for example, requiring that regional executives participate in trade deals involving local textile companies.¹⁵⁵ The strong ties between regional leaders and industry served to lubricate these machines and to crowd out political dissent. Thus, enterprise managers refrained from financially supporting opposition groups, while also ensuring the political docility of enterprise employees by threatening punitive measures should they not vote as instructed. Independent media outlets, such as the newspaper *Ivanovo Press*, reported being threatened with lawsuits by Tikhonov for publishing material critical of regional officials. Independent media critical of the regional government also complained about not receiving any sponsorship from textile companies, which maintained strong ties to regional bosses.¹⁵⁶

Soviet-style co-optation of society and the workforce into quasi-official organizations, as well as ritualized forms of "participation" in governance, had also been widespread. During perestroika, when such practices were already the object of scorn, Ivanovo became notorious

¹⁵² McFaul and Petrov 1998, pt. 1, 520.

¹⁵³ McFaul and Petrov 1998, pt. 1.

¹⁵⁴ *Kommersant*, July 18, 2005; Libman and Obydenkova 2014; *Rossiyskaya gazeta*, December 21, 2005. At <http://www.rg.ru/2005/12/21/tihonov.html>, accessed January 31, 2016.

¹⁵⁵ Author telephone interview with the head of one of Ivanovo's textile enterprises, July 23, 2010. All interviews were conducted in confidentiality unless otherwise noted.

¹⁵⁶ Author interviews, July 2010.

for appointing its textile workers as delegates to official party and Soviet congresses and meetings, thereby “symbolizing the participation of workers in the management of the state.”¹⁵⁷ Ivanovo’s citizen passivity remained a consistent feature of its political landscape. Even at the height of political upheaval in Russia, in 2011–12, when thousands of protesters in many regions took to the streets in antiregime protests, an opposition Web site tracking social activism in Russia’s regions recorded only one protest in Ivanovo.¹⁵⁸

DISCUSSION

The preceding analysis highlights how precommunist education can paradoxically contribute to the subversion of regional democratic potential. This article supports earlier research indicating a positive association between precommunist literacy and postcommunist democracy. We also find that the effect of precommunist literacy is mediated by communist party recruitment. Communists were more likely to be recruited in areas that had been better developed at the time of the imposition of Bolshevik rule. We explained these patterns with reference to the higher human capital of the more developed areas—they could supply larger numbers of recruits to a regime desperate to get itself up and running. These party recruits and their descendants were engaged in the collective effort to promote the USSR’s top-down modernization drive. As the system matured, over time they came to lose the values that classic modernization theorists associate with bottom-up modernization processes. Of course, not all of the developed locales suffered the fate of being cannibalized by the party. Some of the historically developed regions had comparatively low levels of party saturation.¹⁵⁹

This article refines earlier scholarship on the links between precommunist literacy and postcommunist political regime variations. We find that literacy matters even outside of the contexts where it could proxy for institutional autonomy to develop curricula inculcating children with nationalist myths and particular cultural values.¹⁶⁰ Our analysis of Russia points to a more straightforward modernization explanation: even absent nationalist curricula in minority areas and even within the

¹⁵⁷ McFaul and Petrov 1998, pt. 1, 520.

¹⁵⁸ Author data set; data obtained from <http://namarsh.ru>. For a discussion of the protest data set, see Lankina 2015.

¹⁵⁹ Rigby 1968.

¹⁶⁰ Darden and Grzymala-Busse 2006; Peisakhin 2013.

context of an absolutist monarchy, literacy can help kick-start various socioeconomic processes and value orientations that can survive the socially homogenizing communist experiment. We also find, contra Pop-Eleches and Tucker,¹⁶¹ that education obtained before communism may not always serve to promote resistance to authoritarianism. Instead, it could endow the better-educated strata with a survival edge under the new regime and enhanced opportunities to cement it.

Scope conditions of course have to be carefully considered when postulating the external validity of our findings.¹⁶² These scope restrictions apply in particular to our first causal claim—appropriation. Among Soviet puppet regimes in Europe, one does encounter many a “fervent communist[s] who played a key role in establishing communist rule.”¹⁶³ The relatively benign regime installed in Hungary after the 1956 uprising even enjoyed a degree of genuine popular appeal.¹⁶⁴ Nevertheless, whether communism had been homegrown or whether it represented “an alien, inferior imposition by a suspect regional superpower”¹⁶⁵ is bound to have mattered for social receptivity to communist dogma.

We also need to be sensitive to variations in precommunist legacies among communist states. Precommunist national identities, civic consciousness, societal organization, and other variables that could be linked to the political-cultural aspects of the reproduction of legacies, as well as the peculiarities of political, economic, and religious institutions, are likely to have influenced the extent to which the better-educated strata could be appropriated by communist rulers.¹⁶⁶ These legacies also likely affected the bargaining strength of individuals and groups as they negotiated their social position in the new order.¹⁶⁷ Furthermore, also important are East-West developmental variations conditioned over centuries by proximity to centers of trade and growth¹⁶⁸ and by more recent twentieth-century processes of Europeanization.¹⁶⁹ These variations may well have determined whether communism would be regarded in a positive light among potential converts to the Marxist-Leninist faith or invidiously compared with the developmental fruits of the capitalist West.¹⁷⁰

¹⁶¹ Pop-Eleches and Tucker 2013b.

¹⁶² Kotkin and Beissinger 2014.

¹⁶³ Darden and Grzymala-Busse 2006, 102.

¹⁶⁴ Wittenberg 2006, 11.

¹⁶⁵ Darden and Grzymala-Busse 2006, 102.

¹⁶⁶ Elster, Offe, and Preuss 1998; Kitschelt 2003; Bunce 2005; Darden and Grzymala-Busse 2006; Wittenberg 2006.

¹⁶⁷ Kitschelt 2003, 62.

¹⁶⁸ Ekiert and Hanson 2003, 32; Janos 2000; Derluguian 2005.

¹⁶⁹ Kopstein and Reilly 2000.

¹⁷⁰ Darden and Grzymala-Busse 2006.

The temporal scope of communism is also likely to have mattered for societal incentives to be appropriated by the new regime.¹⁷¹ By the 1950s, even the true believers—as epitomized by the Yugoslav communist Milovan Djilas—were having misgivings about Stalinist rule.¹⁷² For those who joined the party not as an act of faith but as a means of career advancement, the relaxation of the totality of state rule over society following de-Stalinization also perhaps meant a relaxation of incentives to blend into the regime. Nevertheless, we know that some degree of opportunism in party applications, particularly among the better educated, had been present in Soviet satellite states throughout the decades of communist rule. As Pop-Eleches notes in discussing communist legacies in Europe: “While Party membership itself was not mandatory, it was nevertheless a crucial precondition for many professional careers and was therefore much more frequent among university graduates.”¹⁷³ Although a number of caveats are in order when applying our analysis to other settings, clearly, appropriation should be considered alongside other “shared” features of communism.¹⁷⁴

When it comes to the subversion component of our argument, recent scholarship makes us even more confident in extending our findings to other postcommunist countries, though here, too, important qualifiers apply. Studies have found that the length of communist rule matters for the propensity of the general citizenry to embrace democracy.¹⁷⁵ As Herbert Kitschelt notes, in states where communism spanned only two generations, the older generation could “draw on skills and experiences never quite lost during communism.”¹⁷⁶ Nevertheless, survey research has revealed that across the universe of postcommunist cases, educated citizens are far less likely to espouse democratic values than those with comparable levels of education in societies that had not experienced communism.¹⁷⁷ In analyzing specifically the links between party membership and postcommunist democratic values and practices, Grzymala-Busse rightly argues that we should be sensitive to the substantial variations among communist countries in terms of the ruling party’s recruitment strategies, policy reform, and record of accommodation with society.¹⁷⁸ We also know that there was something about the nature of involvement in the activities of official

¹⁷¹ Ekiert and Hanson 2003; Kotkin and Beissinger 2014.

¹⁷² Djilas 1983.

¹⁷³ Pop-Eleches 2014, 42. See also Széleányi 1987; Wong 1996.

¹⁷⁴ Kotkin and Beissinger 2014.

¹⁷⁵ Kitschelt 2003; Kotkin and Beissinger 2014.

¹⁷⁶ Kitschelt 2003, 60.

¹⁷⁷ Pop-Eleches and Tucker 2013b; Pop-Eleches 2014.

¹⁷⁸ Grzymala-Busse 2002.

communist organizations that may account for the generally less democratic value orientations of former party cadres in many communist settings.¹⁷⁹

Our study is also relevant to applying theorizing about historical legacies to contexts beyond postcommunism. It highlights the importance of studying the incentives, preferences, and value orientations of actors transcending a narrow group of top decision makers. We demonstrate how the midlevel social classes may be likewise essential for the survival—or subversion—of a post-critical juncture order. While social and educational background and long-term value orientations might be sound predictors of preferences and behaviors under a normal political equilibrium, politically and socially fluid contexts might lead to a shift in preferences for social and political action among particular social strata. We therefore make a plea for extending the analytical focus in studies of historical watershed events beyond the preoccupation with “key political actors” that we discern in Giovanni Capoccia and Daniel Kelemen’s influential article on critical junctures.¹⁸⁰ Our study also serves as an endorsement of Grzegorz Ekiert and Daniel Ziblatt’s point about the need to focus on *continuities*—in our case in the relative social positioning of the literate strata, and the literati, in the pre- and postcritical juncture orders. These continuities might be obscured by an exclusive focus on *rupture*.¹⁸¹ We call for new theorizing and additional empirical work in other contexts. Our theory should help further illuminate—in ways that are at odds with earlier theorizing—how, during regime-transformative critical junctures, citizens’ educational credentials might help solidify support for an emerging autocratic regime or help erode the quality of, or even subvert, a nascent democratic one. This is an agenda for future research.

SUPPLEMENTARY MATERIAL

Supplementary material for this article can be found at <http://dx.doi.org/10.1017/S0043887115000428>.

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¹⁷⁹ Pop-Eleches 2014, 42.

¹⁸⁰ Capoccia and Kelemen 2007.

¹⁸¹ Ekiert and Ziblatt 2013.

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