Content with Failure? Cultural Consolidation and the Absence of Nationalist Mobilization in the Case of the Occitans in France

Yu Sasaki

Does cultural consolidation among ethnic groups lead to nationalist mobilization? Extant research in the study of nationalism suggests a tight connection between the two. My article addresses this question by operationalizing cultural consolidation through language standardization and by providing an empirical analysis. I argue that not all ethnic groups that consolidate their culture build institutions toward sovereignty and propose that cases that fail to invest in institutions make strong contributions to the existing framework in the literature. Following a brief survey on the Bulgarians as a case of successful mobilization, I document evidence from an in-depth study on the Occitans, a minority ethnic group in France, as a failed case. Findings from a process-tracing approach indicate that although the Occitans standardized their language by 1900, their leading intellectuals grew content became content with the situation and failed to make the next move. I contribute by operationalizing cultural consolidation and by introducing "institution-building" as a crucial outcome between cultural consolidation and state-building. My article suggests that decisions of ethnic elites matter to understand why some groups start nationalist mobilization.

Introduction

In the study of ethnicity and nationalism, understanding the link between cultural consolidation and state-building has been a central agenda. A usual starting point, for both theoretical and empirical works, is the analytical distinction between nations as culturally consolidated groups and states as organizations that safeguard them. Seminal works hold that sovereign states come before nations emerge (Anderson 2006; Breuilly 1993; Gellner 2006; Hobsbawm 1990; Tilly 1994). Some point to the existence, besides, states, of an "ancient root" or a "symbol" as a precondition for the rise of nations that helps generate and sustain the belief that members of the community have a common descent (Smith 1986). Recent research also shows that for groups that achieve political independence in the late nineteenth century on, the construction of a coherent and discrete community is key before obtaining independent statehood (Aktürk 2012; Mylonas 2012; Roeder 2007; Wimmer 2002; Wimmer and Feinstein 2010). In practice, however, cultural consolidation and state-building are often seen as mutually reinforcing. One reason is that the nation, which is a population that comprises a set of well-established cultural practices, is often deemed

I thank editor Anne McCants, one anonymous reviewer, Anthony Gill, and Steven Pfaff for their valuable feedback to the previous versions. All errors are mine.

as possessing a *political* right to its own state—hence a right to national self-determination. ¹

The stylized fact in extant research is that cultural consolidation and state-building occur in tandem closely if not mechanically. If one accepts the notion of national selfdetermination, it is reasonable to assume that once a community claims as a nation, political mobilization toward autonomy or independence is expected to follow. Thus, those nations that fail to do so, or "fail to bark" (Gellner 2006: 42-43), seem counterintuitive. One explanation in the scholarship is that many nations that seek sovereignty remain dormant until the breakdown of institutions occurs, which heretofore put constraint on them (Beissinger 2002; Brubaker 1996). A close connection between cultural consolidation and state-building is conceptually and empirically appealing because the sovereign territorial state can function as the ultimate guarantor of the culture of a population. In "ideal types" of nation-states, it is required that a group comprise a state that possesses the monopoly of the legitimate use of violence over its own territory (Weber 1978). Building on this model, scholars seek to leverage their empirical analysis either by varying the enforcement capacity of the state or by varying analytical contexts—based on temporality, geography, or levels of analysis (i.e., international or domestic). Cases in developing countries fit well with the former because they tend to deviate from the Weberian definition of the state. States in developing societies do not typically have as much the capacity to enforce rules or raise revenue as wealthy states do. Society in the developing world also tends to be ethnically more heterogeneous. In these cases, analysts examine the occurrence of violent conflicts or the provision of public goods (Alesina et al. 1999; Bates 1983; Habyarimana et al. 2007, 2009; Miguel 2004; Miguel and Gugerty 2005). In the latter category on the analytical contexts, empirical studies focus on the varying incentive structure that key political actors have in terms of the benefit of rallying their community as a nation or mobilizing toward independence (Alesina and Spolaore 2003; Lawrence 2013).

Few studies empirically investigate the *tightness* of the link between cultural consolidation and state-building. More specifically, variation in the degree of cultural consolidation among nations and its effects on political mobilization have yet to be examined. Extant research addresses the process of cultural consolidation by exploring how elites of a nation impose their cultural practices as standard through the state apparatus. Another approach focuses on how elites of a minority nation command loyalty within their population to stir nationalist mobilization. These works typically accept the notion of the "nation" as a cohesive, well-established group and operationalize it either as an outcome variable or a unitary actor seeking a state. Yet these approaches leave out the possibilities in which ethnic groups fail to consolidate their culture or, following consolidation, fail to mobilize toward self-rule.

In this article, I examine whether elites of stateless ethnic groups establish institutions that facilitate political mobilization after they consolidate culture. To address this

Connor (1994) elaborates on the terminological chaos due to the mutually reinforcing nature of these categories.

question, I use quantitative and qualitative methods to operationalize cultural consolidation and select cases. Evidence draws primarily from the case of failed mobilization by the Occitans, a minority ethnic group in France, but I also briefly consider the Bulgarians as a successful case for comparison. I first summarize major conceptual frameworks in the literature that connect the link between cultural consolidation and state-building. This exercise demonstrates that, among the ethnic minorities in late-nineteenth-century Europe, extant research has yet to address the mechanism of political mobilization after cultural consolidation. To fill this gap, I construct a simple hypothesis that not all ethnic groups invest in institutions even when given an opportunity. I then use propensity-score matching methods to select a pool of potential groups for empirical analysis. My choice of the Occitans is motivated by the "deviant case" method in case-selection strategy, in which the researcher purposefully investigates theoretically counterintuitive, "underperforming" observations to gauge the explanatory power of a hypothesis. The Bulgarian case serves as an expected outcome, and I use it as my reference category to explore the causes of the failed institutionbuilding among the Occitans. My main finding is that although the Occitans achieved cultural consolidation in the late nineteenth century by standardizing their language early and establishing an active, growing literary society with successful publications, the society's senior leadership had little motive to pursue the politically more ambitious goal of federalism or self-determination. They remained unable to resist the effort of the French counterpart on language and cultural unification through free, compulsory primary education across the country. Occitans confined their organization's activity largely to the less ambitious goal of cultural preservation. This inaction proved fateful in the long run, as the movement limited to language revival never regained initial popularity. Today, the political status of the distinct vernacular for the Occitans is uncertain and the vitality of language use in the community is under threat.

This article makes two contributions. First, it adds a new hypothesis to the existing distinction between cultural consolidation and state-building, where I identify "institution-building" as an intermediate category that can be used as a distinct outcome. My goal is more to widen the scope of empirical analysis in the existing mechanism than to construct a new theory. Introducing this category as an outcome of interest yields a handful of new empirical questions that have not been previously explored: Does cultural consolidation lead to institution-building? Does institutionbuilding lead to state-building? How tight is each link? What explains its strength? Second, I address one of these empirical questions, namely the connection between cultural consolidation and institution-building. I measure cultural consolidation by focusing on language standardization as one of the most important dimensions of culture and operationalize it by using the first publication date of vernacular dictionaries for 104 ethnic groups in Europe. Then I investigate whether ethnic elites build institutions as my outcome variable in a detailed case study of the Occitans. Its main findings is that not all groups that achieve cultural consolidation engage in institution-building. Occitan elites had the capacity and resources to build institutions by starting schooling in the vernacular and expanding their literary society, but they opted for a more modest goal and not to compete openly with the French for self-rule. My process-tracing analysis shows that the decision of minority elites of a leading cultural organization plays a crucial role in understanding whether institution-building occurs. It documents evidence that the linkage between cultural consolidation and state-building is not as tight as typically assumed. My analysis suggests that there are likely unobserved factors that make the connection and need to be identified for a fuller understanding of why some ethnic groups succeed in winning their own state.

A Conceptual Framework on Political Mobilization among Stateless Nations

Among numerous hypotheses in the literature on ethnicity and nationalism about the linkage between cultural consolidation and state-building, a common framework seems to exist that applies to the stateless ethnic groups. It abstracts a causal path from cultural consolidation to state-building. The path refers to the stylized fact about how ethnic groups consolidate their culture by establishing a set of rules that define their cultural practices before mobilizing their community for political ends—typically autonomy or independence. This generalization emerges from the experience of ethnic minorities in the late nineteenth century through the early twentieth century, in which they highlight cultural differences between them and their imperial masters to stir a nationalist movement and press for independence in the name of anticolonialism. The mobilization took place across the globe as much of the world at the time was ruled by European empires. Some definitions are in order before discussing this mechanism in detail. In this article, I follow Weber (1978: 389) to define ethnic groups as those that "entertain a subjective belief in their common descent" based on what they perceive as a unique set of shared attributes that delimit membership. Building on this concept, I define nations as those ethnic groups that successfully standardize their cultural attributes. These definitions that center on cultural dimensions are useful for distinguishing cultural standardization from institution-building for political purposes, the latter of which I examine in terms of "success" and "failure."

My analytical approach is distinct from that of classical works whose frameworks rest on the assumption that nation-states are essentially a function of having a sovereign territorial state. These works uncover patterns or important factors that explain how ethnic groups consolidate their culture (Anderson 2006; Breuilly 1993; Gellner 2006; Hobsbawm 1990; Tilly 1994). One of the contributions of this research is to produce numerous forms of "ideal types" on nations and nationalism that inform empirical research in subsequent generations (Brubaker 1992; Kohn 2005).

Recent works address the variation of outcomes in nationalist and secessionist movements by constructing testable hypotheses based typically on a set of detailed case studies. For instance, Brubaker (1996) examines the impacts of major institutional breakdowns, such as the collapse of the Soviet Union, on different forms of secessionism. Similarly, Mylonas (2012) considers how international and geopolitical factors shape the outcomes of nationalist mobilization by drawing on minority groups

in the Balkans. These studies are important in that they specify conditions under which nationalist or separatist movements achieve their ultimate goal of acquiring a sovereign territorial state. Their hypotheses allow for distinguishing between groups that are more or less likely to succeed when certain conditions are met.²

I build on these classical and recent contributions to explore whether ethnic minorities foster institutions toward greater political autonomy after standardizing their cultural practices. Cultural consolidation among ethnic minorities in the late nineteenth century, particularly those in Europe, happened in reaction to nationalist movements in earlier decades (Anderson 2006: ch. 3). Many early-starters, such as the Greeks and the Serbs, successfully achieved autonomy or independence and then began to rationalize their culture through national citizenship and universal education (Hobsbawm 1990; Tilly 1994). By contrast, latecomers, such as the Slovenes and the Bretons, typically took the opposite path by consolidating their culture first before seeking political freedom. Ethnic elites in the latter pattern would typically organize a literate society and issue journals, history, and novels in their vernaculars. These publications are intended not only to make minority ethnicity salient across their community but also to help bring about language standardization, because in many empires their tongues were used in everyday communications but rarely in official channels. Intellectuals of minority groups may also start schooling taught in a vernacular that would have the same effect. In this conceptual framework, once linguistic unity is achieved, ethnic elites are expected to follow their earlier examples to mobilize toward territorial sovereignty. A similar pattern is observed in contemporary cases of anticolonial and secessionist movements beyond Europe (cf. Cunningham 2014; Manela 2009).

The mechanisms of political mobilization following cultural consolidation among stateless ethnic groups have not been widely investigated. Recent quantitative works provide evidence regarding which minority communities achieve "nation-building" or the status of "nation-states" (Roeder 2007; Wimmer 2018; Wimmer and Feinstein 2010). Yet few consider the linkage between cultural consolidation and institution-building toward political mobilization. I distinguish between institution-building and state-building as analytically different concepts. The former is a necessary step to the latter; investing in political institutions would foster state capacity in terms of rule enforcement, taxation, and other administrative transactions. It is crucial to explore this mechanism because, as I show later, the connection between the two is not automatic. Doing so requires one to take a close look at the process of whether ethnic elites strengthen their own institutional capacity. Detailed case studies are appropriate for this type of hypothesis testing because it is not readily captured in quantitative analysis.

My outcome variable in this article is whether elites of ethnic minorities invest in institutions for political mobilization. Territorial sovereignty would be the ultimate goal for them, and the movement typically takes a nationalist character in that ethnic elites seek to generate mass support by making their national identity politically

^{2.} For other recent contributions, see, inter alia, Aktürk (2012), Martin (2001), and Hirsch (2005).

salient and framing the action in the name of *their* nation. As extant research suggests, the success of nationalist mobilization depends on the strength of political institutions such as parties, religious centers, unions, and other types of associations. They play a crucial role as an organizational hub that enables ethnic elites to promote their causes and mobilize their community on a large scale. I argue that the development of these institutions, in turn, rests on prior cultural consolidation. My main explanatory variable is cultural consolidation focusing on language rationalization among ethnic minorities. It matters to institution-building not only because it facilitates within-group communication but also because, once certain rules about cultural practices are established, elites may use them as political instruments to command mass loyalty to the group and build organizational capacity.

My analytical approach has two advantages. First, it is consistent with the distinction that classical works on nationalism makes between state-building and cultural consolidation. Second, it adds an "intermediate" category in this distinction by exploring the mechanism of political mobilization among ethnic minorities. The new category, which is my outcome variable, is also analytically separate from either sovereign territorial states or cultural consolidation. The rest of my article investigates this mechanism in a detailed study primarily on a *failed* case of institution-building. It not only demonstrates the conceptual significance of the mechanism but also provides evidence through a systematic measurement of cultural consolidation and case selection.

Empirical Strategy

Process-Tracing Methods

I use process-tracing methods to investigate the mechanism linking cultural standardization and institution-building toward political mobilization. My goal is to uncover a causal process of whether ethnic elites who achieve early language standardization invest in institutions. Process tracing is a method to identify causal processes between an explanatory variable and an outcome variable (George and Bennett 2005: 206). The main rationale is to establish what scholars of this methodological tradition call "causal-process observations," which refer to "pieces of data that provide information about context, process, or mechanism," the kind of observations that enables analysts to draw causal inference (Brady and Collier 2010: 318). This is an appropriate method for this article because few investigations address the mechanism in question as an outcome of interest and the mechanism as a causal process has not been firmly established. It also fits the purpose of my article because ethnic elites' decision about whether to foster institutions is not easily quantifiable (or has yet to be done on a large scale) (Gerring 2007). Thus, a key advantage of process tracing is its malleability in application: the researcher can use it to both develop conceptual frameworks and test hypotheses (Bennett and Checkel 2014; Mahoney 2003, 2010).

Scholars have developed numerous process-tracing strategies and standards to establish causality, but implementation remains a challenge (Dunning 2012, 2014).

Case-study approaches are most useful when validating the statistical correlation between two variables or when identifying alternative hypotheses or omitted variables. Yet it remains unclear *which* cases would be appropriate to make causal inferences and *how* they can be drawn because of the need to control for background conditions before proceeding to comparison. In traditional strategies, for example, the methods of agreement and of difference, the researcher conditions on the value of a main independent variable or the dependent variable. But the probabilities that these values occur or the conditioning of control variables attract less attention (Sekhon 2004).³ To mitigate this problem, I use a strategy based on matching to select cases systematically.

Descriptive Data on the Link between Cultural Consolidation and Institution-Building

Before proceeding to my strategy of case selection, I provide descriptive data on the connection between cultural consolidation and institution-building. Of myriad cultural attributes that ethnic groups can standardize, I focus on language. Once the vernacular is codified, an ethnic group has an easier time communicating within group, which makes the standardization of other cultural dimensions more effective. Ethnic elites may use it as a political instrument to begin an effort to mobilize their community and build institutional capacity based on political parties and religious centers. Language standardization is crucial for setting this process in motion. However, it is one of the most difficult dimensions to standardize because it requires literacy when compared to other cultural attributes such as flags and anthems, which do not. In addition, codification requires high fixed costs. Languages evolves through importing and exporting words from one another, and its codification typically entails the "purification" process by studying the etymology of words and removing foreign ones to demonstrate that language serves as an untainted symbol of *political* identity for an ethnic group (Burke 2004).

Figure 1 documents the cumulative output of language standardization for 104 European ethnic groups from 1750 to 2000. I proxy language standardization by taking the first publication year of vernacular dictionaries for each ethnic group. This operationalization demonstrates the difficulty and high fixed costs of vernacular codification as captured in Figure 1. Specifically, it offers three insights. First, language rationalization is difficult and entails high fixed costs. Of the 104 groups, only 27 communities (or 26.5 percent) did so by 1900, and most instances take place in the twentieth century. Some ethnic groups that comprise a state, such as the Italians, the Swedes, the French, and the Russians, cover these costs by founding a specialized, government-sponsored academy. Those that did not comprise an independent state may launch a literacy society or a cultural organization to promote their

^{3.} For recent innovations that systematically leverage a control case to draw inference from comparative case studies, see Glynn and Ichino (2015, 2016).

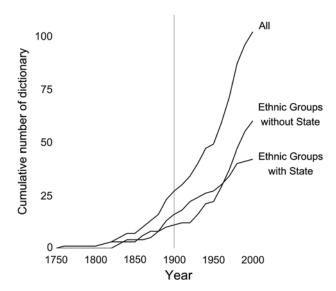


FIGURE 1. Cumulative number of vernacular dictionary publication among 104 European ethnic groups. Source: Burke (2004), Dalby (1998), Price (1998), among others.

vernacular and teach it at local schools.⁴ Second, Figure 1 provides evidence that cultural consolidation, through language standardization, and state-building are distinct processes as postulated in the literature. In particular, it begs a question as to why not all ethnic groups that have codified vernaculars comprise sovereign states. Third, there is little difference in the instances of language standardization between those groups that comprise a state and those that do not by the turn of the twentieth century. When the year 1900 is used as the cutoff for "early standardization" (the vertical bar in Figure 1), there are 27 cases in total, in which 16 had an independent state while 11 did not. This evidence is consistent with my hypothesis that among ethnic minorities, cultural consolidation is not necessarily connected to institution-building toward autonomy or independence.

Descriptive evidence drawn from Figure 1 motivates my case-selection strategy for empirical analysis. Specifically, I use the "deviant case" method to investigate the link between cultural consolidation and institution-building (Gerring 2007: ch. 5). It allows the researcher to choose cases that overperform or underperform relative to an expected value on one's prediction (ibid.: 107). In my context, deviant cases are the ethnic groups whose leaders *fail* to build institutions toward political mobilization. They "underperform" in that they are expected to invest in their institutional capacity not just to augment the chances of autonomy but also to ensure survival as a distinct

^{4.} This piece of data also suggests that language standardization is never a "natural" outcome and requires an investment in its own right.

community. If elites do not make such a move, their group is likely to remain as a minority—or, worse, may face the prospects of cultural assimilation or integration by their majority ethnic group in the context of waves of nationalist movements in turn-of-the-century Europe. Choosing a deviant case generates evidence for these groups that make this counterintuitive decision. As Gerring (2007: 106) points out, the purpose of this method is "to probe for new—but as yet unspecified—explanations." In the nationalism literature, King (2010) makes among the first attempts to construct a framework on "failures" of nation-building as the main outcome of interest. The deviant-case method is the initial step in my strategy of case selection to shed new light on the linkage between cultural consolidation and state-building.

Matching Methods for Case Selection

In the next step, I use matching methods for case selection and causal inference. Matching is a nonparametric preprocessing approach to adjust observational data before the parametric analysis (Ho et al. 2007; Stuart 2010). Social science research often relies on observational data when experiments are infeasible. Unlike experimental data, observational data almost always lack balance or are not randomly distributed across the sample. Imbalance creates difficulty for causal inference because it violates the assumption of ignorability or the absence of selection on observables (Ho et al. 2007: 206–7). If this violation is suspect, one needs to address the concern that unobserved factors might determine the outcome variable and/or explanatory variables.

The primary goal of matching is to improve balance in the distribution of covariates (Ho et al. 2007: 215; Stuart 2010: 1). This strategy offers two advantages. First, preprocessing data reduces dependence on one's choices of statistical modeling and specifications (Ho et al. 2007). By taking an extra step to achieve balance in the distribution of covariate data between the treatment group and the control group, the link between the treatment variable and the control variables is eliminated or diminished (ibid.: 212). Subsequent statistical analysis, if the researcher chooses to do so, is less dependent on the assumptions of their proposed models and specifications. Second, matching methods focus on the distribution of covariates where there is not much overlap between the treatment and control groups when causal effects are estimated. Statistical models tend to perform poorly when overlap is insufficient, but researchers become more aware of data limitations in their claims about causal estimates when using smaller data through matching methods (Stuart 2010: 2).

Propensity Score Matching

In this article¹, I use propensity score matching. It is a popular strategy for case selection and causal inference and is widely used not just in social sciences but also in

medicine and health (ibid.: 1). The propensity score is an index of the likelihood that a key explanatory (or "treatment") variable occurs based on observational data. Studies that employ this method typically proceed in two steps. First, the researcher estimates a model, where the matching variable is the outcome, to calculate propensity scores of the matching variable. These scores are used to assign observations into the treatment group (the matching variable that occurred) or the control group (the matching variable that did not). In the second step, the analyst estimates the effect of the propensity as the approximate average treatment effect on the outcome of interest.

In my case, the outcome is whether an ethnic group builds institutions toward political mobilization after early language standardization. I define *early* as language standardization by 1900 because only 16 percent (27 out of 171 ethnic groups in my data set) had published a vernacular dictionary by the turn of the twentieth century (26.5 percent when NAs are omitted). I use this indicator T_i as the treatment variable to assign ethnic groups in my data set:

$$T_i = \begin{cases} 1 \text{ if ethnic group standardized language by 1900} \\ 0 \text{ if ethnic group did not standardize language by 1900} \end{cases}$$

 $T_i = 1$ refers to a subset of my data set where ethnic group *i* codified its vernacular by 1900 and $T_i = 0$ indicates the rest of the ethnic groups that did not do so, given the pretreatment characteristics of the homeland city for each ethnic group. More formally, this case selection strategy aims to capture the effect of T_i on the outcome, Y_i , which is whether ethnic groups invest in institutions:

$$Y_i \equiv Y_i(T_i) = (T_i)Y_i(1) + (1 - T_i)Y_i(0)$$
 (1)

To assign ethnic groups in the treatment and control groups, I first compute propensity scores that denote the probability of achieving vernacular codification by 1900, conditional on a vector of ethnic group attributes X_i :

$$P(X_i) = \Pr(T_i = 1 | X = X_i) = E[T_i | X = X_i]$$
 (2)

This data preprocessing allows me to capture the effect of early language standardization on whether ethnic groups start institution-building by conditioning on potential confounding variables for language standardization.

It is important to note that matching based on propensity scores is not without problems. One is that causal estimates from matching models can suffer from model dependence. It is the problem in which the researcher makes inferences from fitted models but extrapolations are not supported by the existing data or these extrapolations are outside the bounds of underlying data (King and Zeng 2007). Propensity-score matching does not, in theory, reduce model dependence (Iacus et al. 2012).

But the rationale of using this matching strategy in my article is to select cases for hypothesis generation rather than to estimate causal effects of the models. More specifically, my goal is not to extrapolate the impact of early language standardization on state-building but to find cases that bear empirical similarities and differences as a preparatory step for in-depth investigation, rather than to estimate the causal effects of my models, the latter to which these limitations apply.

I estimate propensity scores using a logistic regression model, where the outcome variable is a binary indicator of whether 171 European ethnic groups standardized their language by 1900. Following Sasaki (2017), I proxy language standardization by taking the first publication date of vernacular dictionaries. I include all covariates used in the estimation in this article, but I made two major changes. One is that I truncate the data to pre-1900 to capture the pretreatment effects of the variation in language standardization. Second, I transform the original time-series and crosssectional data set to enable cross-sectional estimation because the original data set contained information from 1400 through 2000.6 More specifically, I recode the following time-varying covariates: First, I obtain the total time (in years) that ethnic groups have the printing press by calculating the time elapsed since print adoption. I also create the total time for the university and bishoprics for each group using the same method. Second, I calculate the mean for the war frequency and urban potential variables between 1400 and 1900. War frequency represents the average occurrence of war during this period. Urban potential is a measure of economic growth used in economic history by capturing the extent to which population growth of a given homeland city is affected by cities nearby. Higher values indicate that cities are surrounded by other competing (i.e., growing) cities and lower values mean that growth occurs in a sparsely populated area. Third, I recode the country fixed effects for the Ottoman, Russian, and Habsburg empires by calculating time under each of these polities. Some stateless ethnic groups, especially those in Eastern and Central Europe, underwent multiple state "owners" over the course of the five centuries. Fixed effects do not represent this change, so I calculate total years of each of these imperial rulers. The rest of the variables is time-invariant and needs no transformation.

Table 1 documents logistic and OLS estimators on language standardization by 1900 (complete results are available in the Supplementary appendix). Consistent with the results in Sasaki (2017), the variable on the printing press is significantly positively associated with language standardization. More concretely, elapsed time since the adoption of print technology increases the chances of vernacular codification by 0.6 percentage points. Similar results obtain when the OLS is used. Compared to the estimates in Sasaki (2017), the magnitude of the printing press variable is small because only 27 of 171 ethnic groups achieved language standardization by 1900. The vast majority of cases occurred in the twentieth century.

I use the parameter estimates of the logistic model to calculate propensity scores. Figure 2 displays the densities of the scores for two groups: those that standardized

^{6.} The sources of these variables and the summary statistics are in the Supplementary appendix.

Model	Logit	OLS
Time since print adoption	(1) 0.006* (0.003)	(2) 0.0005* (0.0003)
Controls	Yes	Yes
Religion fixed effects	Yes	Yes
Geographic region fixed effects F-statistic	Yes	Yes 2.49***
Wald Chi square	3.58*	
R^2	0.342	0.162
Observations	171	171

TABLE 1. Regression outputs of language standardization for ethnic groups by 1900

Source: See Clair (1976) and Febvre and Martin (1976) primarily for the sources of the printing press. For other variables and the coding strategy, see the Supplementary appendix.

Note: Western Europe is used as the reference category for region fixed effects and thus omitted. Catholic is used as the reference category for religion fixed effects and thus omitted. The Wald Chi Square is the effect of time since print adoption. R^2 for logistic regression is pseudo- R^2 . The complete results are available in the Supplementary appendix.



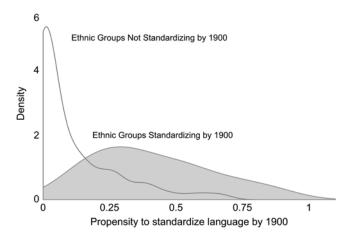


FIGURE 2. Distribution of propensity scores for two sets of ethnic groups on language standardization by 1900.

language by 1900 and those that did not. It shows that ethnic groups with standardization have largely higher scores, while those without it are typically concentrated in low propensity scores, especially in the scores between 0 and 0.25. Still, the distribution of both subsets is similar in that the scores are largely less than 0.5.

Ethnic Group	Score	Dictionary by 1900	Sovereign State	Country
French	0.888	Yes	Yes	France
Occitans	0.838	Yes	No	
Swiss-Germans	0.726	Yes	Yes	Switzerland
Russians	0.722	Yes	Yes	Russia
Rhinelanders	0.680	No	No	
Flemish	0.667	Yes	No	
Romands	0.663	No	No	
Burgundians	0.620	No	No	
Belarussians	0.587	No	Yes	Belarus
Alsatians	0.574	Yes	No	
Armenians	0.565	No	Yes	Armenia
Bulgarians	0.541	Yes	Yes	Bulgaria
English	0.539	Yes	Yes	Britain
Germans	0.536	Yes	Yes	Germany
Swabians	0.513	No	No	•
Dutch	0.508	Yes	Yes	Netherlands

TABLE 2. Ethnic groups with the propensity score above 0.5

Source: Author calculations.

Note: Theoretically counterintuitive outcomes are highlighted in bold.

Table 2 further breaks down the distribution for 16 groups with the propensity score of 0.5 or above. It adds two columns of information: dictionary publication by 1900 and territorial sovereignty today. Two points merit attention. First, high propensity scores reflect the high likelihood of early vernacular codification. Of the 16 groups, 10 achieved codification by 1900. Second, nine groups acquire or maintain an independent state. Observations are more equally distributed between those with a state and stateless units.

This variation provides purchase for case selection with a focus on deviant cases. It raises an empirical puzzle as to why early language standardization does not always lead to state-building. This is at odds with the hypothesis discussed earlier, in which ethnic groups, once standardization is achieved, would have an incentive to build institutions and mobilize toward self-rule to increase the chances of survival. The decision *not* to build on this momentum appears counterintuitive. In the European context, it is a highly risky choice to the extent that it is near self-destruction because of recurring warfare and territorial conquest in the early modern period through modern times (McNeill 1982; Tilly 1975, 1992; Wimmer 2013). The inability to raise revenue and manpower for defense would leave ethnic groups vulnerable to political incorporation by others that comprise an independent state. However, descriptive evidence from Table 2 shows that this empirical puzzle offers a case-selection strategy based on the counterfactual framework.

Table 3 displays the relationship between language standardization and institution-building, where the ethnic groups in the table are examples drawn from Table 2. The top left cell represents the expected outcome, where ethnic groups, such as the Bulgarians, the French, and the Dutch, would invest in state institutions following

TABLE 3. Two-by-two table on the relationship between language standardization and state-capacity building

		Institution-Building			
		Yes	No		
Early Language Standardization	Yes	Bulgarians, French (expected outcome)	Occitans, Alsatians (counterfactual outcome)		
	No	Belarusians, Armenians (counterfactual outcome)	Burgundians, Swabians (expected outcome)		

Source: Table 2. The blank cells in the "Country" column indicates no sovereignty for the given ethnic group.

early language standardization. The top-right cell denotes the counterintuitive outcome, in which ethnic minorities such as the Occitans and the Alsatians failed to build institutions for political mobilization despite language standardization.⁷ Tables 2 and 3 inform case selection. The outcome in the first group may seem unsurprising given that groups like the French already comprised their own state and had resources for language rationalization and means for enforcing the vernacular. Yet they also include groups like the Bulgarians that were long under the yoke of imperial powers. They were able to codify their vernacular without first having an independent state, and only in the twentieth century did they achieve sovereignty. These are "near miss" observations, as they could have belonged to the bottom row of Table 3 if they did not achieve language standardization early. Similarly, those in the top-right cell constitute near misses for a different reason in that they missed the opportunity to acquire greater political autonomy. These borderline cases provide a rationale for detailed investigation because they could shed light on the causal mechanism in question (Lieberman 2005), which in my article is the link between cultural consolidation and state-building.

I first offer a brief discussion of the Bulgarian case as one that codified the vernacular by 1900 and obtained territorial sovereignty in the twentieth century. Bulgarians came late in terms of both cultural consolidation and political mobilization for independence. They did not have a strong tradition of vernacular use until the nineteenth century but managed to codify their vernacular in 1895 while under Ottoman rule (Dalby 1998). In a separate effort, Bulgarians achieved "religious independence" by erecting their own church in the mid-1870s. For them, the independent church served as a key institutional basis from which their elites launched the independence movement later. This example constitutes the reference category in my empirical analysis. By contrast, the Occitans serve as a deviant case that did not experience institution-building. They were among the early language standardizers by publishing the first monoglot dictionary in 1875 (ibid.). By the

^{7.} To explain the rest of the outcomes in Table 3, the bottom right is an expected outcome, while the bottom left is a counterintuitive outcome but outside the scope of this article.

mid-nineteenth century, the Occitans had long lost their sovereignty, but there was a growing window of opportunity for political autonomy amid the debate over the possibility of a federalism in France. Unlike the Bulgarian counterpart, few Occitan elites were interested in building institutions and pressing for federalism—or political freedom more generally. I show in the next section that this inaction proved critical in explaining the divergent outcome between the Bulgarians and the Occitans.

Investigating the Link between Language Standardization and Institution-Building

The Case of the Bulgarians

The Bulgarians were the last of the Balkan groups under Ottoman rule to start political mobilization toward autonomy or independence. Geographical proximity to Constantinople likely played a major role for this laggedness (Jelavich and Jelavich 1977: 128). Like many minority vernaculars, Bulgarian was a local language spoken primarily in day-to-day communications; until the late 1870s, Turkish was the administrative language and Greek was the language of service in the Bulgarian Orthodox Church (Price 1998: 42). Linguistic development initially took place outside of what is today's Bulgarian territory. It was in Venice in 1566 that the first book in Bulgarian—a collection of prayers—was printed. Before the mid-nineteenth century, Bulgarian speakers had to rely on non-Bulgarian towns such as Belgrade, Budapest, and Bucharest for the production of printed books in their tongue (Macdermott 1962: 136). Similarly, in 1838 when the officially-recognized Bulgarian printing press was set up, the print shop was built in Salonika, today's Greece, and not in the area of Bulgarian residence (ibid.: 136). Bulgarians had to wait another eight years until the press was set up in Samokov, a town near Sofia. The absence of vernacular print in the area of Bulgarian residence was indicative of the extent to which the linguistic norm of Bulgarian, of its modern form, existed before modern times (Price 1998: 42).

Two relevant developments also promoted the standardization of Bulgarian. The first is schooling. The first Bulgarian-speaking school opened in 1835 in Gabrovo. The founder, Vasil Evstatiev Aprilov, emulated the European style that was secular, free, and open to all (Macdermott 1962: 126). Literate Bulgarians were able to amass support for vernacular education among the peasantry. Despite the Greek opposition, they established primary schools across approximately 1,479 towns and villages (ibid.: 300). The second is the founding of literate societies. Among the first was the Bulgarian Letters (Bulgarski Knizhnina) formed in Constantinople in 1852. It published the *Bulgarian Papers* (*Bulgarski Knizhitsi*), which took up secular themes such as science, commerce, and agriculture (ibid.: 141). In a similar vein, Marin Drinov, a historian and philologist, helped found the Bulgarian Literary Society (Knizhovno Druzhestvo) in 1869, which later became the Bulgarian Academy of Sciences upon independence. Drinov was a major advocate of the "revival" of the

Bulgarian people by writing extensively about the "historical roots" of the population through the society's publication, *Periodical Journal* (Daskalov 2004: 2). Despite the relatively late start, Bulgarian elites effectively used schools, literary organizations, and their publications to codify their vernacular by the turn of the twentieth century.

The critical factor that allowed the Bulgarians to move from the phase of cultural consolidation to that of state-building was the establishment of an independent Bulgarian church: the Bulgarian Exarchate of 1870. It constitutes a critical institution-building episode for the Bulgarians as a nation. Previously, ecclesiastical affairs on Bulgarian land were under Greek control. Granted by the Ottoman decree, Bulgarians in 1870 took control over their own religious affairs. The independent church gave the Bulgarians the freedom to appoint bishops to the dioceses within the newly constituted province (i.e., the exarchate). It also came with the authority to appropriate revenue from the schools, churches, and other ecclesiastical properties (Mylonas 2012: 60). Furthermore, the church offered extensive organizational networks that were deeply rooted in each locale. Its hierarchical structure made policy implementation effective. Thus, the church provided a strong platform equipped with the capacity not only to organize collective action for political ends but also transmit political identities (cf. Kalyvas 1996).8 Although religious independence was not intended as part of the movement for political independence (Jelavich and Jelavich 1977: 134–35; Macdermott 1962: 167), the church served as a crucial organizational basis through which Bulgarian elites mobilized their community toward sovereignty in the first decade of the twentieth century.

In sum, the Bulgarians in the nineteenth century achieved both cultural consolidation through language standardization and institution-building through religious independence while under Ottoman rule. These were two distinct processes and not based on a grand, coherent vision, but they nicely converged upon the decision of Bulgarians to pursue sovereignty. The independence of the church proved significant for their subsequent political movement, which, as hypothesized in the nationalism literature, made a bridge between cultural consolidation and state-building. By contrast, the Occitans followed a different path. As I show next, they did not build on their successful linguistic codification to invest in institution-building. I demonstrate that this inaction plays a key role in explaining the divergent outcome on political independence between the Bulgarians and the Occitans.

The Case of the Occitans

The geographical area of Occitania, the territory that Occitans claim as their homeland, broadly refers to the southern half of today's France (the "Midi"). The hilly region that cuts across the middle of France historically served as the natural

Kalyvas (1996) explores this mechanism in the context of confessional party formation in Western Europe.



FIGURE 3. Region of Occitan speakers at the time of the French Revolution. Note: The Occitan-speaking region is denoted by gray and Languedoc, a province within the Occitan region, is denoted by black. The white dot within Languedoc represents Toulouse.

borders for demarcation. The south is climatically and culturally different from the north. Prior to French incorporation in the early thirteenth century, those who lived in Occitania had closer cultural ties with Spanish and Italian speakers than with French speakers (Paterson 1993). The most important region within Occitania is Languedoc, the southernmost region of France that faces the Mediterranean, whose political and economic centers comprise the cities of Toulouse, Carcassonne, and Narbonne (see Figure 3). This area began to be the target of political incorporation by the Capetian monarch in 1209 through his participation in what is later known as the Albigensian Crusade (1209–29). The Capetian assertion of rule continued through much of the thirteenth century (Given 1990: 39). Although the struggle for control over this territory with English monarchs continued intermittently through the mid-fifteenth century, Occitania remained primarily under French rule (Beik 1985: 37). For the Occitans, the Albigensian Crusade and the subsequent French conquest constituted the watershed because any prospects for independence began to disappear with the incursion (Marvin 2008: 306). For the Capetians, annexing the large territory of Occitania provided a new major source of income (Strayer 1971: 46–47).

In the wake of the Crusade, the Capetians installed what may be described as "indirect rule," in which local institutions were retained in preference to the

^{9.} France's participation was originally in response to the pope's call to stamp out the Cathars in southern France who were deemed by the Catholics as heretics. For major works, see, for instance, Costen (1997), Strayer (1992), and Wakefield (1974).

transplantation of royal institutions and local aristocrats managed to preserve and exercise limited authority over legal and economic affairs (Given 1990: 57–63). One rationale is that this is a typical governance strategy in Europe from the Middle Ages until around 1750 because the political centers like Paris were too weak to project power over their nominal domain (Elliott 1992; Koenigsberger 1987). It is an inexpensive yet practical compromise that ruling monarchs were willing to make so long as the autonomous local elites pledged loyalty in terms of taxation. Another reason that indirect rule was preferred is because of the differences in law, society, and culture between northern France and Occitania, which made direct rule too costly at the time (Strayer 1971: 51).

Beginning in the early fifteenth century, a new institution of indirect rule was established. Languedoc, along with other departments in the countryside, was accorded with the status of a *pays d'états*, one of the two types of administrative jurisdiction (provincial estates) under the Ancien Régime. ¹¹ It is a department-level administrative category for the purposes of taxation. Residents of this status possessed the right to hold representative assemblies, where elites could negotiate tax burdens with the monarch and collect taxes on their own (Kwass 2000: 70). This institution thus allowed the residents to retain a degree of self-government in terms of rights and privileges. Languedoc, whose provincial capital was located in Toulouse, convened the assemblies roughly once a year from 1418 until 1789 when all the Ancien Régime institutions were abolished. ¹² In addition to the matters of taxation, attendees introduced legislation and debated budgetary allocation on public goods (Swann 2012). The assemblies of Languedoc enjoyed greater discretion over the regional affairs than those of other regions, such as Brittany, Burgundy, and Artois, and as a result, the residents were able to preserve strong regional identities (Beik 1985: 38). ¹³

A degree of self-rule implies that the Occitans would enjoy the freedom to use and develop the vernacular as the primary means of communication. It seems that the vast majority of them knew little French and, especially in Languedoc, spoke virtually no French throughout the early modern period. Although direct evidence is scant, this linguistic situation can be inferred from the 1863 survey, which shows that few Occitans throughout the region spoke French words well into the late nineteenth century (Weber 1976: 68). By contrast, a small group of literate Occitans learned French (Cohen 2000). They had a stronger incentive to master French rather than developing the Occitan language because the ability to use the language of the political center allowed them to negotiate directly with the monarch over taxation at

^{10.} See Dincecco (2015) for a discussion of the problems of reliably and consistently raising revenue due to the fragmentation of authority.

^{11.} The other type is the *pays d'élection*, where royal bureaucrats came to levy taxes directly. There is a third category, *pays d'imposition*, which was applied to later-acquired territories.

^{12.} The data on the frequency of regional bodies came from Kiser and Linton (2002) and Blockmans (1976).

^{13.} This interpretation of the early modern era, especially during the "absolutist" period in which the monarch depended much more on the provincial elites for stability than previous research showed, is based on the emerging historiography on absolutism as "social collaboration." See Beik (2005) and Campbell (2012) for reviews.

the provincial assembly. These literates could take advantage of the language market to gain access to the information that was available only in French and advocate the tax regime to their own benefit (Laitin 1988). Moreover, from the sixteenth century on these local elites formed a marriage of convenience with Parisian bureaucrats so that local elites could retain their privilege and the central government could raise revenue at the expense of the peasantry (Bates 1988; Root 1987).

The nineteenth century saw sort of a Renaissance in intellectuals' attitudes toward local history and culture. Influenced by German Romanticism, scholarly interest in the Occitan language and the history of southern France grew. Both French and Occitan authors took up this effort. For instance, Jean-Bernard Mary-Lafon, a historian, dramatist, and linguist, published a series of influential works on the history of the Occitan region that recounts not just politics but also religion and literature (Roza 2003: 59). In addition, there were French-language works on the Troubadours, the poets and singers during the "golden age" of the Occitan culture developed in the thirteenth century, and on Occitan grammar books. Occitan literates also composed poems in the vernacular. These poems described the lives of the working-class people in the region and gained popularity among regular Occitans, as Occitan poets, who also belonged to the working class as bakers, hairdressers, and wig makers, traveled across the region (ibid.: 61). This growing intellectual effort to understand the history, language, and culture of the Occitans culminated in 1875 in the publication of the first comprehensive vernacular dictionary, Dictionnaire analogique et étymologique des idiomes méridionaux (Explanatory and etymological dictionary of the southern dialects). This 1,344-page volume was edited by Louis Boucoiran, a little-known historian originally from Nîme. To be clear, the publication was not tantamount to the unification of various Occitan dialects. Although the growing investment in and the popularity of the Occitan language was a reaction to the parallel—and larger—effort on the standardization of French by the Third Republic, it seems that the Occitans had no political entrepreneur who took the effort to unify the Occitan tongues (Smith 1973). Vernacular codification took place, but there was little institution-building to launch a political movement.

In the mid-nineteenth century, Occitans did mobilize for cultural revivalism. In 1852 they founded the Félibrige, a literary society, primarily to promote the greater use of the Occitan language throughout the Midi or the Occitan homeland. The most prominent member was Frédéric Mistral, a poet and one of the seven founding members, who wrote not only a series of poetry but also edited two-volume dictionaries in the late nineteenth century. His literary work was recognized with the award of the Nobel Prize in Literature in 1904. The appellation, Félibrige, was derived from *felibre*, the Occitan word for a doctor which, in turn, denotes "teacher" and "sage" (Roza 2003: 74). The motive of the organization is epitomized in Article 1 of the mission statement:

The Félibrige is established to forever preserve for Provence its language, its color, freedom for its grace, its national honor and its great ranks of intelligence, for it is Provence that agrees with us. By Provence, we mean the entire Midi of France. (ibid.: 96)

Joseph Roza (2003: 65) discerns two concrete goals from the record of the organization's activities. The first is to remove the social stigma attached to using the Occitan tongue; the second is to secure survival as a literary language while Occitan was widely spoken within southern France. Contributing members sought to achieve these goals through publication on a regular basis and participation in social events.

The most important publication that the Félibrige put together was the *Armana Prouvençau*, an almanac. First released in 1855, this annual publication contained a collection of news, poems, and essays in Occitan. Literates decided on the almanac as an ideal outlet because it would not only convey their thoughts in the vernacular but also chronicle events that were important specifically to the Occitans (ibid.: 76). The almanac's first edition was printed for around 500 copies, but it quickly gained popularity so that it sold up to 3,000 copies by 1872 and 10,000 copies annually in the decade between the 1880s and the 1890s (ibid.: 83). With the *Armana Prouvençau*, Mistral sought to encourage lay readers to use Occitan in everyday communication without fear of being chastised not to use French. He argued:

From a habit of imitation and bourgeois prejudice—which unfortunately is spreading more than ever—people had become accustomed to avoiding as "vulgar" the words most ingrained in Provençal speech, and ... commonly and quite uncritically used the corrupt, bastardized, Frenchified forms that were spoken in the streets. Once we had made up our minds to write in the language of the people, [the Félibre] had to bring out and set off to advantage its characteristic bluntness, vigor, and richness of expression, and we agreed to write the language purely as it was spoken in places free of outside influence. (Mistral 1986: 81)

When the Félibrige worked to solidify its foothold, the political and social environment in France was an auspicious one. In 1868, Napoleon III lifted the imperial decree of 1852 on the press, which gave an impetus to publish on politically sensitive topics. More important, the mid- to late nineteenth century was a time for great uncertainties in France. There was a constant struggle for the constitutional system between monarchism and republicanism. The uncertainties were especially acute in 1870 following the sudden, unexpected defeat in the Franco-Prussian War. These created room for new ideologies, which some political entrepreneurs exploited to champion their causes. In the new Third Republic that began in 1871, several parties with new ideologies fought for supremacy to fill this ideological space (Hanson 2010: ch. 4). Ambitious leaders of the Savoyards and the Bretons within France stoke nationalist sentiments among their respective populations for self-determination. At the same time, the political uncertainties gave other emerging political actors a pause. For example, Catholic elites were considering forming a Christian party and

mobilizing lay followers to secure their influence in the government. They feared that if "secular" Republicans came to power for a prolonged period, this would threaten the political power that the Church enjoyed under centuries of monarchical rule. The Catholics eventually chose not to form a party as they predicted—incorrectly—the republicans in power not to last long (Kalyvas 1996: ch. 3). The uncertain environment thus offered a historic opportunity for new ideologies to arise. This period was also prior to the introduction of free, mandatory primary education. Thus, in this context the Félibrige could have taken advantage of the instability in the political center to mobilize lay Occitans, invest in their own institutions, and promote their cause.

The political uncertainties about *what type* of the constitutional structure would emerge and *how long* it would last afforded a historic opportunity to demand a change in governance arrangements. More specifically, demographic minorities seeking greater self-rule may pursue autonomy or some form of a federal system that can guarantee political freedom. In France, indirect rule gave way to more direct rule following the Revolution. In the initial stage of the process, Jacobin leaders improvised an institutional arrangement that granted commercial centers like Marseille and Lyon with regional autonomy. However, as the revolutionary government took shape, it instead installed a centralizing system of direct rule on key dimensions of governance like taxation, policing, and public goods across the country (Tilly 1992: 109–10).¹⁴

The transition period between the Second Empire and the Third Republic in the 1860s through early 1870s provided another opportunity for institutional change. Extant scholarship hypothesizes that a federal system is likely to emerge when the gap in military capacity between the core unit and the peripheral units is small (Riker 1964). Alternatively, a country may adopt federation if subordinate units had the institutional capacity to enforce rules and administer policy within them and can raise revenue on behalf of the political center (Ziblatt 2004, 2006). Given that the political and military turmoil during this period left the state capacity of Paris relatively underdeveloped, it could give minority groups like the Occitans an incentive to build indigenous institutions to strengthen bargaining leverage and demand concessions from the Parisian authorities (Gerring et al. 2011: 380). 15

Moreover, a group of French intellectuals supported federation as a constitutional foundation in the event of the collapse of monarchism toward the end of the Second Empire. Federalism emerged as one of the three major ideological strands among the Parisian intelligentsia. ¹⁶ French federalists used the commune as the primary political unit and highlighted unity based on liberty, equality, and loyalty to the state (Hazareesingh 1998: 284). At the same time, this ideology advocated democracy

^{14.} Historical works show that France transplanted direct rule—under banner of *mission civilisatrice* (civilizing mission)—in its colonial possessions. See, for instance, Conklin (1997).

^{15.} The recent literature shows that the incentives of politicians play a central role in understanding the institutional shapes of and the effects of federalism. See Rodden (2008) and Beramendi (2009) for review.

^{16.} The other two forces include Jacobinism, which believed in centralization as a remedy to the constitutional struggle, and municipalism, a compromise between federalism and Jacobinism.

as it espoused consensus and self-governance among the communes. As Auguste Vermorel, a social republican, argues: "[Unity] should result from the free will of groups and their harmonious adhesion to common principles, which are the guarantee of the greatness, independence, and prosperity of the nation. It is the communes ... that should direct it" (ibid.). Decentralization was deemed preferable to state centralization because advocates believed that support for republicanism still remained weak in the countryside and that federation would compensate for this reality (ibid.: 285). Although federalists eventually gave way to Jacobinists who promoted centralization under the Third Republic (Hanson 2010: 101–2), federalism was a viable ideological force in mid-nineteenth century France.

In this political climate, the Félibrige continued to expand in the first decade of the Third Republic. It established the new branch in Paris, through which to interact with French intellectuals on a regular basis and expand political and social networks. The new office was also used to raise public awareness about the linguistic situations in the south and garner support for the Occitan language. This strategy initially proved effective in securing the right to use the vernacular in higher education. In 1875, Occitan literates placed the petition in the National Assembly to restore the teaching and study of Occitan at the Universities of Aix, Toulouse, and Montpellier. In three years it was approved for Montpellier (Roza 2003: 242). They could have taken advantage of this initial win to reinforce their cause across a wider circle of Occitan speakers. However, this was the apogee of institution-building by the Félibrige, and it seems that the hope of the greater use of the language through university education petered out in the mid-1870s.

One important reason is the absence of leadership. There is little evidence that suggests that the Félibrige sought to transform the literary society to launch a political platform. It appears that it was a deliberate decision at the organizational level not to seek regional autonomy or independence. Through the interactions in Paris, Occitan literates concluded that overt political activism for language rights would make too high risks to bear in an industrializing France where proficiency in French was not only a major political goal but also a highly desirable skill for productivity and upward mobility. In this environment that was adverse to cultural diversity, the Félibrige highlighted the importance of using Occitan, or non-French languages more broadly, "to improve students' knowledge of French" because French was not a native tongue for most pupils in the south (ibid.: 248). This defensive strategy reflected the Félibrige's belief that French policy makers would never accept bilingual education in Occitan and French, let alone Occitan monolingualism in the Occitan-speaking region.

After the summer of 1886, the Félibrige abandoned its goal to press for language rights and promote the greater use of Occitan in France in favor of a more modest objective of language preservation. In April 1887, Alphonse Roque-Ferrier, a prominent member, contributed an article in the Montpellier daily, *Messager du Midi*:

The goal of the Félibrige is then the maintenance of this language that we do not have to learn in prep school, and the desire to see it spoken with the same purity as the language of Corneille, the first serving the teaching of the second, and the second serving the teaching of the first. (ibid.: 250)

This trajectory suggests that the lack of institution-building among the Occitan elites lies primarily in the absence of leadership to pursue formal rights to use the Occitan language at school or political activism for greater autonomy.

The Félibrige's in action can be further attributed to two factors. The first is the generational divide. The Félibrige was never a monolithic group; on the contrary, there were significant differences in political goals across generations. Young members embraced the ambition of a federal France because Paris's initiative of institutional centralization was perceived as promoting cultural homogeneity and thus a grave threat to the Occitan culture. For instance, Paul Meriéton, a young Félibre and one of the most vocal members calling for federation, argued that centralization would lead to "vaingloriousness" and the "depravation and death" of the Occitan culture that his organization was seeking to revive (Roche 1954: 27). In February 1892, he put forward his political goal in the "Déclaration des Félibres Fédéralistes," addressed to the president of the literary society:

Yes, we want an Assembly at Bordeaux, at Toulouse, at Montpellier; we want one at Marseilles or at Aix. And these Assemblies must control the administration, the courts, the schools, and universities, as well as public works. (ibid.: 64)

The statements by Meriéton and other young members who shared the view were soon printed in newspapers in both Occitan and French and widely circulated. They raised the suspicion from Paris that the Félibrige was harboring the intention to pursue not just federation but ultimately separatism, the charge that older members had carefully avoided (Wright 2003: 46–47).

Older generations, however, remained modest about the political ambitions for the literary society. As research on intellectual history finds, Frédéric Mistral, a founding member and the inaugural president, always equivocated the questions about the group's political goals or the politicization of its activity. While he seemed sympathetic to younger members' call for political activism, he neither condoned nor reproved such demand and left virtually no writings on politics (ibid.: 20, 47). It seems that the primary goal of the older generations was a renaissance of what they perceived as the distinct civilization that had achieved its apex prior to the Albigensian Crusade. Evidence from older generations' remarks suggests that the victory of the Crusaders constituted the "sources of spiritual life dried up." As Mistral noted, "[B]ecause, what really subdued, note it well, was less the South materially speaking, than the spirit of the South" (Roche 1954: 52). The Félibrige's leadership consistently reminded that its purpose was cultural preservation, and Mistral maintained that only through loyalty to *la grande patrie* (the big, native land of France) could Occitans' language and culture achieve "communal glory" (ibid.: 65).

The second reason for the lack of political mobilization is the internal discord within the literary society. Julian Wright (2003: 48) points out that the generational divide was found not just over the organization's political goals but also over the politics within the organization. Elections, titles, and statutes were main sources of the fight. The leadership positions and titles were scarce goods, and officeholders or titleholders could exercise disproportionate influence over the group's political future. For example, these members can ultimately decide whether to pursue greater language use in school instruction or whether to form a political party. Given that the Félibrige was the leading literary society of the Occitans, access to these goods would be highly desirable, even essential, if some members espoused the ambition for self-rule. The presence of bureaucratic politics suggests that founding members occupied senior positions while denying younger members access to them who were dissatisfied with their leaders' apolitical attitudes toward group activity. The 1892 declaration of the demand for federalism could be characterized as an outburst of the internal discord.

The generational divide eventually led to the split of the organization. Meriéton and other like-minded young members left the Félibrige to join an existing political party or found a new one. The breakup was the harbinger of the more formal—yet, again, unsuccessful—political movement of regionalism, most notably the *Fédération régionaliste française*, that arose in the twentieth century. Occitan speakers led the way by inheriting their ideological inspirations from the federalist strand of the constitutional debate that French intellectuals had toward the end of the Second Empire (Beer 1980; Wright 2003).

For the Félibrige, the turn of the century was the period of sharp decline as a literary society. More and more school-age children went to school and studied only in French in preference of Occitan (or other non-French languages spoken at home) (Weber 1976). Vocal young members quit the organization. Senior members, by contrast, achieved a modest success at securing the right to teach Occitan at one university but largely abandoned the strategy of persuading the Parisian counterparts to recognize bilingual education in favor of a more moderate, practical goal of language preservation. As founding members aged and began to die, the organization's activity shrank in terms of the volume of publications and the number of public events (Roza 2003: 274). Although the Félibrige has still been in existence today, their role has remained the same—language and cultural preservation.

Conclusion

This article explores whether elites of ethnic minorities build institutions for political mobilization after cultural consolidation. My innovations are to provide a measurement of cultural consolidation through language standardization and to choose cases among stateless ethnic groups for in-depth investigation based on the degree of vernacular codification by 1900. I use process tracing to compare the successful case of the Bulgarians to the failed case of the Occitans. My empirical analysis indicates

that while Bulgarian elites established an independent religious institution through which to win mass support for political autonomy, the Occitan counterparts did not make a similar action and ended up content with cultural preservation. My main finding is that not all ethnic groups invest in institutions following language rationalization. I show that ethnic elites' indecision or perceptions of taking political risks accounts for this seemingly counterintuitive finding.

One of the broader implications of this study is that the connection between cultural consolidation and state-building may not be as strong as suggested in the literature on nationalism. My article proposed institution-building as one intermediate category within this link. Future research could identify others for a sharper conceptual framework. For instance, one might ask if ethnic elites call a deliberative assembly as part of their effort to foster state capacity and eventually to win sovereignty. Extant scholarship shows that some semblance of state institutions is required for aspiring ethnic groups to be nation-states (Roeder 2007), but what causes the development of state capacity has yet to be examined. This development would be a useful outcome variable because it constitutes a precursor to the development of a sovereign state. This approach opens a new avenue for empirical analysis that leads to the better understanding of why some ethnic groups consolidate culture and win achieve sovereignty more effectively than others.

Supplementary Material

To view supplementary material for this article, please visit https://doi.org/10.1017/ssh.2019.6.

References

Aktürk, Şener (2012) Regimes of Ethnicity and Nationhood in Germany, Russia, and Turkey. New York: Cambridge University Press.

Alesina, Alberto, and Enrico Spolaore (2003) The Size of Nations. Cambridge, MA: MIT Press.

Alesina, Alberto, Reza Baqir, and William Easterly (1999) "Public goods and ethnic divisions." *Quarterly Journal of Economics* 114 (4): 1243–84.

Anderson, Benedict (2006) *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, rev. ed. London: Verso.

Bates, Robert H. (1983) "Modernization, ethnic competition, and the rationality of politics in contemporary Africa," in Donald Rothchild and Victor A. Olorunsola (eds.) States versus Ethnic Claims: African Policy Dilemmas. Boulder, CO: Westview Press: 152–71.

—— (1988) "Lessons from history, or the perfidy of English exceptionalism and the significance of historical France." World Politics 40 (4): 499–516.

Beer, William R. (1980) The Unexpected Rebellion: Ethnic Activism in Contemporary France. New York and London: New York University Press.

Beik, William (1985) Absolutism and Society in Seventeenth-Century France: State Power and Provincial Aristocracy in Languedoc. Cambridge: Cambridge University Press.

—— (2005) "The absolutism of Louis XIV as social collaboration." Past and Present 188: 195–224.

- Beissinger, Mark R. (2002) *Nationalist Mobilization and the Collapse of the Soviet State*. New York: Cambridge University Press.
- Bennett, Andrew, and Jeffrey T. Checkel (2014) "Process tracing: From philosophical roots to best practices," in Andrew Bennett and Jeffrey T. Checkel (eds.) *Process Tracing: From Metaphor to Analytic Tool.* New York: Cambridge University Press: 3–37.
- Beramendi, Pablo (2009) "Federalism," in Carles Boix and Susan C. Stokes (eds.) Oxford Handbook of Comparative Politics. New York: Oxford University Press: 752–81.
- Blockmans, Wim P. (1976) "Le régime reprèsentatif en Flandre dans le cadre Européen au bas moyen age avec un projet d'application des ordinateurs," in Album Elémer Màlyusz: Studies Presented to the International Commission for the History of Representative and Parliamentary Institutions (Études présentées à la Commission Internationale pour l'Histoire des Assemblees d'États). Bruxelles: LVI: 211–45.
- Brady, Henry E., and David Collier, eds. (2010) *Rethinking Social Inquiry: Diverse Tools, Shared Standards*, 2nd ed. Lanham, MD: Rowman and Littlefield.
- Breuilly, John (1993) Nationalism and the State, 2nd ed. Chicago: University of Chicago Press.
- Brubaker, Rogers (1992) Citizenship and Nationhood in France and Germany. Cambridge, MA: Harvard University Press.
- (1996) Nationalism Reframed: Nationhood and the National Question in the New Europe. New York: Cambridge University Press.
- Burke, Peter (2004) Languages and Communities in Early Modern Europe. Cambridge: Cambridge University Press.
- Campbell, Peter R. (2012) "Absolute monarchy," in William Doyle (ed.) The Oxford Handbook of the Ancien Régime. New York: Oxford University Press: 11–38.
- Cohen, Paul (2000) "Of linguistic Jacobininsm and cultural balkanization: Contemporary French linguistic politics in historical context." *French Politics, Culture, and Society* 18 (3): 21–48.
- Conklin, Alice L. (1997) A Mission to Civilize: The Republican Idea of Empire in France and West Africa, 1895–1930. Stanford, CA: Stanford University Press.
- Connor, Walker (1994) Ethnonationalism: The Quest for Understanding. Princeton, NJ: Princeton University Press.
- Costen, Michael (1997) *The Cathers and the Albigensian Crusade*. Manchester, UK: Manchester University Press.
- Cunningham, Kathleen Gallagher (2014) *Inside the Politics of Self-Determination*. New York: Oxford University Press.
- Dalby, Andrew (1998) A Guide to World Language Dictionaries. London: Library Association Publishing. Daskalov, Roumen (2004) The Making of a Nation in the Balkans: Historiography of the Bulgarian Revival. Budapest and New York: Central European University Press.
- Dincecco, Mark (2015) "The rise of effective states in Europe." Journal of Economic History 75 (3):
- Dunning, Thad (2012) Natural Experiments in the Social Sciences: A Design-Based Approach. New York: Cambridge University Press.
- —— (2014) "Improving process tracing: The case of multi-method research," in Andrew Bennett and Jeffrey T. Checkel (eds.) *Process Tracing: From Metaphor to Analytic Tool.* New York: Cambridge University Press: 211–36.
- Elliott, J. H. (1992) "A Europe of composite monarchies." Past and Present 137: 48-71.
- Gellner, Ernest (2006) Nations and Nationalism, 2nd ed. Malden, MA: Blackwell.
- George, Alexander L., and Andrew Bennett (2005) Case Studies and Theory Development in the Social Sciences. Cambridge, MA: MIT Press.
- Gerring, John (2007) Case Study Research: Principles and Practices. New York: Cambridge University Press.
- Gerring, John, Daniel Ziblatt, Johan van Gorp, and Julián Arévalo (2011) "An institutional theory of direct and indirect rule." World Politics 63 (3): 377–433.

- Given, James (1990) State and Society in Medieval Europe: Gwynedd and Languedoc under Outside Rule. Ithaca, NY: Cornell University Press.
- Glynn, Adam N., and Nahomi Ichino (2015) "Using qualitative information to improve causal inference." American Journal of Political Science 59 (4): 1055–71.
- —— (2016) "Increasing inferential leverage in the comparative method: Placebo tests in small-n research." Sociological Methods and Research 45 (3): 598–629.
- Habyarimana, James, Macartan Humphreys, Daniel N. Posner, and Jeremy M. Weinstein (2007) "Why does ethnic diversity undermine public goods provision?" *American Political Science Review* 101 (4): 709–25.
- (2009) Coethnicity: Diversity and the Dilemmas of Collective Action. New York: Russell Sage Foundation.
- Hanson, Stephen E. (2010) Post-Imperial Democracies: Ideology and Party Formation in Third Republic France, Weimar Germany, and Post-Soviet Russia. New York: Cambridge University Press.
- Hazareesingh, Sudhir (1998) From Subject to Citizen: The Second Empire and the Emergence of Modern French Democracy. Princeton, NJ: Princeton University Press.
- Hirsch, Francine (2005) Empire of Nations: Ethnographic Knowledge and the Making of the Soviet Union. Ithaca, NY: Cornell University Press.
- Ho, Daniel E., Kosuke Imai, Gary King, and Elizabeth A. Stuart (2007) "Matching as nonparametric preprocessing for reducing model dependence in parametric causal inference." *Political Analysis* 15 (3): 199–236.
- Hobsbawm, Eric (1990) Nations and Nationalism since 1780: Programme, Myth, Reality. Cambridge: Cambridge University Press.
- Jelavich, Charles, and Barbara Jelavich (1977) *The Establishment of the Balkan National States*, 1804–1920. Seattle and London: University of Washington Press.
- Iacus, Stefano M., Gary King, and Giuseppe Porro (2012) "Causal inference without balance checking: Coarsened exact matching." *Political Analysis* 20 (1): 1–24.
- Kalyvas, Stathis N. (1996) The Rise of Christian Democracy in Europe. Ithaca, NY: Cornell University Press
- King, Charles (2010) Extreme Politics: Nationalism, Violence, and the End of Eastern Europe. New York: Oxford University Press.
- King, Gary, and Langche Zeng (2007) "When can history be our guide? The pitfalls of counterfactual inference." *International Studies Quarterly* 51 (1): 183–210.
- Kiser, Edgar, and April Linton (2002) "The hinges of history: State-making and revolt in early modern France." *American Sociological Review* 67 (6): 889–910.
- Koenigsberger, H. G. (1987) Early Modern Europe, 1500-1789. London: Longman.
- Kohn, Hans (2005) The Idea of Nationalism: A Study in Its Origins and Background. New Brunswick, NJ: Transaction.
- Kwass, Michael (2000) Privilege and the Politics of Taxation in Eighteenth-Century France: Liberté, Égalité, Fiscalité. Cambridge: Cambridge University Press.
- Laitin, David D. (1988) "Language games." Comparative Politics 20 (3): 289-302.
- Lawrence, Adria K. (2013) Imperial Rule and the Politics of Nationalism: Anti-Colonial Protest in the French Empire. New York: Cambridge University Press.
- Lieberman, Evan S. (2005) "Nested analysis as a mixed-method strategy for comparative research." American Political Science Review 99 (3): 435–52.
- Macdermott, Mercia (1962) A History of Bulgaria, 1393-1885. London: George Allen and Unwin.
- Mahoney, James (2003) "Strategies of causal assessment in comparative historical analysis," in James Mahoney and Dietrich Rueschemeyer (eds.) *Comparative Historical Analysis in the Social Sciences*. New York: Cambridge University Press: 337–72.
- —— (2010) "After KKV: The new methodology of qualitative research." World Politics 62 (1): 120-47.
- Manela, Erez (2009) The Wilsonian Moment: Self-Determination and the International Origins of Anticolonial Nationalism. New York: Oxford University Press.

- Martin, Terry (2001) The Affirmative Action Empire: Nations and Nationalism in the Soviet Union, 1923–1939. Ithaca, NY: Cornell University Press.
- Marvin, Laurence W. (2008) The Occitan War: A Military and Political History of the Albigensian Crusade, 1209–1218. New York: Cambridge University Press.
- McNeill, William H. (1982) The Pursuit of Power: Technology, Armed Force and Society since A.D. 1000. Chicago: University of Chicago Press.
- Miguel, Edward (2004) "Tribe or nation? Nation building and public goods in Kenya versus Tanzania." World Politics 56 (3): 323–62.
- Miguel, Edward, and Mary Kay Gugerty (2005) "Ethnic diversity, social sanctions, and public goods in Kenya." *Journal of Public Economics* 89 (11–12): 2325–68.
- Mistral, Frédéric (1986) The Memoirs of Frédéric Mistral, trans. George Wickes. New York: New Directions.
- Mylonas, Harris (2012) The Politics of Nation-Building: Making Co-Nationals, Refugees and Minorities. New York: Cambridge University Press.
- Paterson, Linda M. (1993) The World of the Troubadours: Medieval Occitan Society, c. 1100–c. 1300. Cambridge: Cambridge University Press.
- Price, Glanville, ed. (1998) Encyclopedia of the Languages of Europe. Malden, MA: Blackwell.
- Riker, William H. (1964) Federalism: Origins, Operation, Significance. New York: Little, Brown.
- Roche, Alphonse V. (1954) Provençal Regionalism: A Study of the Movement in the Revue félibréenne, Le Feu and Other Reviews of Southern France. Evanston, IL: Northwestern University Press.
- Rodden, Jonathan A. (2008) "Federalism," in Barry R. Weingast and Donald A. Wittman (eds.) Oxford Handbook of Political Economy. New York: Oxford University Press: 357–70.
- Roeder, Philip G. (2007) Where Nation-States Come From: Institutional Change in the Age of Nationalism. Princeton, NJ: Princeton University Press.
- Root, Hilton L. (1987) Peasants and King in Burgundy: Agrarian Foundations of French Absolutism. Berkeley and Los Angeles: University of California Press.
- Roza, Joseph P. (2003) "French languages and French nationalism: The Félibrige, Occitan, and the French identity of southern France, 1854–1914." *PhD diss.*, University of Washington.
- Sasaki, Yu (2017) "Publishing nations: Technology acquisition and language standardization for European ethnic groups." *Journal of Economic History* 77 (4): 1007–47.
- Sekhon, Jasjeet S. (2004) "Quality meets quantity: Case studies, conditional probability, and counter-factuals." Perspectives on Politics 2 (2): 281–93.
- Smith, Anthony D. (1986) The Ethnic Origins of Nations. Malden, MA: Blackwell.
- Smith, Nathaniel B. (1973) "Historical symbolism and mythology in the Occitanist and Félibrige movements." Contemporary French Civilization 3 (1): 47–69.
- Strayer, Joseph R. (1971) Medieval Statecraft and the Perspectives of History. Princeton, NJ: Princeton University Press.
- —— (1992) The Albigensian Crusade, 2nd ed. Ann Arbor: University of Michigan Press.
- Stuart, Elizabeth A. (2010) "Matching methods for causal inference: A review and a look forward." Statistical Science 25 (1): 1–21.
- Swann, Julian (2012) "Parlements and provincial estates," in William Doyle (ed.) The Oxford Handbook of the Ancien Régime. New York: Oxford University Press: 93–108.
- Tilly, Charles (1975) "Reflection on the history of European state-making," in Charles Tilly (ed.) *The Formation of National States in Western Europe*. Princeton, NJ: Princeton University Press: 3–83.
- (1992) Coercion, Capital, and European States, AD 990-1992. Malden, MA: Blackwell.
- —— (1994) "States and nationalism in Europe, 1492-1992." Theory and Society 23 (1): 131-46.
- Wakefield, Walter L. (1974) *Heresy, Crusade and Inquisition in Southern France, 1000–1250*. Berkeley and Los Angeles: University of California Press.
- Weber, Eugen (1976) Peasants into Frenchmen: The Modernization of Rural France, 1870–1914. Stanford, CA: Stanford University Press.
- Weber, Max (1978) Economy and Society: An Outline of Interpretive Sociology, eds. Guenther Roth and Claus Wittich. Berkeley: University of California Press.

- Wimmer, Andreas (2002) Nationalist Exclusion and Ethnic Conflict: Shadows of Modernity. New York: Cambridge University Press.
- —— (2013) Waves of War: Nationalism, State Formation, and Ethnic Exclusion in the Modern World. New York: Cambridge University Press.
- (2018) Nation Building: Why Some Countries Come Together While Others Fall Apart. Princeton, NJ: Princeton University Press.
- Wimmer, Andreas and Yuval, Feinstein (2010) "The rise of the nation-state across the world, 1816 to 2001." *American Sociological Review* 75 (5): 764–90.
- Wright, Julian (2003) The Regionalist Movement in France, 1890–1914: Jean Charles-Brun and French Political Thought. Oxford: Clarendon.
- Ziblatt, Daniel (2004) "Rethinking the origins of federalism: Puzzle, theory, and evidence from nineteenth-century Europe." *World Politics* 57 (1): 70–98.
- —— (2006) Structuring the State: The Formation of Italy and Germany and the Puzzle of Federalism. Princeton, NJ: Princeton University Press.

Appendix for

"Content with Failure? Cultural Consolidation and the Absence of Nationalist Mobilization in the Case of the Occitan Nation in France"

June 11, 2018

Contents

A1 Coding rules for the variables used in regression analysis	A2
A2 Summary statistics	A4
A3 Regression analysis of language standardization	A5
References	A7

A1 Coding rules for the variables used in regression analysis

This section discusses my coding strategy and the sources of the variables used in the parametric models (whose results are reported in Section A3).

Unit of analysis

The ethnic group is the unit of analysis in my paper. I built a data set on 171 European ethnic groups that existed from 1400 to 2000. I draw primarily on Minahan (2000) for entries on these ethnic groups and add others referred to, but not entered, in Minahan's volume. I double-check them using *Ethnologue* compiled by Lewis, Simons, and Fennig (2013). I identify the main homeland city of each group and collect relevant attributes based on it.

Dependent variable

The outcome variable is the timing of language standardization. As discussed in the main body, I proxy it for the first publication date of a comprehensive, monolingual vernacular dictionary. By "comprehensive" I mean dictionaries that try to cover the entire alphabets. Dictionaries are an adequate proxy because they require high fixed costs of understanding and developing a tongue. They also require literacy on the part of the users. The dictionary data rely mainly on Burke (2004), Dalby (1998), and Price (1998). For some ethnic groups in the Caucasus, I use Nordhoff, Hammarström, Forkel, and Haspelmath (2013).

Covariates

A main covariate of interest discussed in the main text is the time elapsed since the adoption of the printing press. The print variable comes from various sources but primarily from Clair (1976) and Febvre and Martin (1976), which cover Western, Southern, and Central Europe. I also use Burke (2004), Price (1998), and Steinberg (1974) as supplementary sources. For the ethnic groups in the German-speaking area, I use Reske (2007).

The sources of the year of universities' foundation come from Darby and Fullard (1970) and Rüegg (four volumes, 1992–2011) on the history of European universities. Those of the bishoprics come from Chaney (2015).

Urban potential is my proxy for economic growth and often used as such in economic history. It is originally constructed by de Vries (1984) as the sum of the populations in the given period divided by the geographical distance between a city and all others in my data set. Formally, this variable is obtained by N population,

 $\sum_{i=1}^{N} \frac{\text{population}_{j}}{\text{distance}_{ij}}$. With distance as the weight, this variable gives a sense of whether a city is surrounded by

competing urbanizing towns or located in a more sparsely-populated area. Higher values indicate greater potential for urbanization. The standard source on population size in preindustrial Europe is Bairoch, Batou, and Chévre (1988), which covers the period 800 through 1850 for hundreds of European cities. Bosker, Buringh, and van Zanden (2013) correct some of the data in Bairoch et al. and I follow their updates in compiling my data. For the period after 1850, I use several statistical handbooks including Mitchell (2003*a*,*b*). I also include an indicator for an *oceanic port*, taking the value of 1 if an ethnic group's homeland is located near or on the coast.

Geographical distance to Wittenberg or Zürich captures the impact of the Protestant Reformation. These two cities played a crucial role in the spread of Protestantism, in which shorter distance indicates higher likelihood that ethnic groups would be exposed to this religious movement. Following Pfaff and Corcoran (2012), I construct this variable by taking the nearest distance between the given ethnic homeland and either

of the Protestant centers.

War frequency represents the effect of war. I draw on the database compiled by Brecke (1999) for warrelated data. It records any conflict in the world with the minimum of 32 casualties in the period between
1400 and 2000. As Brecke uses states as the unit of analysis, I take care to localize the incidence of war at the
ethnic-group level to the extent possible. For instance, if a war occurred in the Habsburg Empire, I regard that
war as affecting all ethnic groups within its imperial domain. The frequency is coded at a fifty-year interval,
and I take the average to permit cross-sectional analysis.

I also collect data on other geographical, institutional, and political variables. One is a set of geographical attributes which include *elevation above the sea level* and *terrain ruggedness*. These data are found in the GLOBE (Global Land One-kilometer Base Elevation project) database (GLOBE Task Team and others 1999). Values for terrain ruggedness in the GLOBE data set come from the Terrain Ruggedness Index, originally devised by Riley, DeGloria, and Elliot (1999). A third geographical variable is an indicator on the island, taking the value of 1 if an ethnic group's homeland is located on an island.

I also include a set of institutional variables related to the Roman Empire's influence. Romans built roads across the cities they reached, which gave these cities an opportunity to develop institutional capacity in economic activity and political organization. I use the atlases in Talbert (2000), Hammond (1981), Åhlfeldt (2015), and *Pleiades* (2015) to collect information about the Roman legacy. More specifically, I create an indicator taking the value of 1 if a city had "major" or "minor" Roman roads (the terms used in these atlases). Following Bosker, Buringh, and van Zanden (2013), those cities with two or more major roads are coded as *Roman hubs* and those with one major road or one or more minor roads are coded cities with *Roman roads*.

Finally, I account for the impact of major European empires. I include *time elapsed under imperial rule* for the Ottoman, Russian, and Habsburg Empires based on Nüssli (2011) which shows the political "owner" of each European city that existed at the beginning of each century. I also include indicators for religion (Catholicism, Protestantism, Orthodoxy, and Islam) and for geographical region as fixed effects.

A2 Summary statistics

Table A1: Summary statistics.

	N	mean	median	sd	min	max
Outcome variable						
Year of vernacular dictionary	104	1935	1954	51	1755	2005
Main explanatory variable						
Year of printing press adoption	96	1566	1526	115	1460	1930
Control variables						
Year of vernacular Bible	144	1789	1837	193	1380	2012
University	67	1672	1735	208	1150	1925
Bishop	99	1250	1400	608	100	2000
Elevation (m)	171	405.3	145	581	-24	2,823
Terrain ruggedness (m)	171	137.51	59.87	205	0	1, 125
Urban potential	171	8.43	2.89	14.99	0.35	99.45
War frequency (in 50-year periods)	171	8.05	5	8.75	0	37
Distance from Wittenberg (km)	171	1,669	1,429	948	89	5,292
Distance from Zürich (km)	171	1,711	1,516	1,048	0	3,350
Hub Roman road	171	0.12	0	0.33	0	1
Roman road	171	0.32	0	0.46	0	1
Oceanic port	171	0.38	0	0.49	0	1
Island	171	0.1	0	0	0	1
Russian Empire/Muscovy	171	0.15	0	0.36	0	1
Ottoman Empire	171	0.105	0	0.31	0	1
Habsburg Empire	171	0.08	0	0.27	0	1
Orthodox	171	0.16	0	0.37	0	1
Catholic	171	0.35	0	0.47	0	1
Protestant	171	0.17	0	0.1	0	1
Islam	171	0.29	0	0.45	0	1
Western Europe	171	0.16	0	0.36	0	1
Northern Europe	171	0.14	0	0.35	0	1
Southern Europe	171	0.16	0	0.40	0	1
Eastern Europe	171	0.40	0	0.49	0	1
Western Asia	171	0.10	0	0.30	0	1

A3 Regression analysis of language standardization

 $Table\,A2:\,OLS\,and\,logistic\,regression\,outputs\,of\,language\,standardization\,by\,1900\,among\,171\,European\,ethnic\,groups.$

model	logit	OLS
	(1)	(2)
Time since print adoption	0.006^{*}	0.0005^{*}
	(0.003)	(0.0003)
Time since university founded	0.003*	0.001**
•	(0.002)	(0.0002)
Time since bishopric erected	-0.001	-0.0001
-	(0.001)	(0.0001)
Mean urban potential	0.074	0.001
•	(0.349)	(0.041)
Log distance to Wittenberg/Zü	rich -0.0002	-0.00003
	(0.001)	(0.0001)
Mean war frequency	0.071	0.009
- ,	(0.080)	(0.010)
Elevation	-0.0002	0.00002
	(0.002)	(0.0001)
Terrain ruggedness	-0.002	-0.0001
	(0.005)	(0.0002)
Hub Roman road	0.344	0.039
	(0.861)	(0.107)
Roman road	0.345	0.051
	(0.736)	(0.081)
Oceanic port	-0.395	-0.048
-	(0.909)	(0.081)
Island	0.941	0.100
	(1.120)	(0.111)
Time under Ottoman Empire	-0.003	-0.0004
	(0.004)	(0.0004)
Time under Russian Empire	-0.001	-0.0002
	(0.004)	(0.0004)
Time under Habsburg Empire	-0.003	-0.0005^*
	(0.003)	(0.0003)
Orthodox	1.745	0.193
	(1.469)	(0.123)
Protestant	0.801	0.086
	(0.852)	(0.099)
Islam	-15.527	0.032
	(1,395)	(0.126)

continued on next page

continued from previous page

model	logit (1)	OLS (2)
Northern Europe	-0.754	-0.147
	(1.080)	(0.126)
Southern Europe	-0.573	-0.108
	(1.020)	(0.115)
Eastern Europe	0.316	-0.014
	(1.166)	(0.135)
Western Asia	1.066	-0.0001
	(2.568)	(0.168)
Intercept	-4.270	0.051
	(2.867)	(0.307)
Observations	171	171
<i>F</i> -statistic		2.49***
Wald Chi square	3.58^{*}	
R^2	0.342	0.162

Note: Western Europe is used as the reference category for region fixed effects and thus omitted. Catholic is used as the reference category for religion fixed effects and thus omitted. The Wald Chi Square is the effect of time since print adoption. R^2 for logistic regression is pseudo- R^2 . *** denote p < 0.01, ** p < 0.05, and * p < 0.1.

References

Åhlfeldt, Johan. 2015. "Digital Atlas of the Roman Empire.".

URL: http://dare.ht.lu.se/

Bairoch, Paul, Jean Batou, and Pierre Chévre. 1988. La Population des Villes Européennes de 800 à 1850: Banque de Données et Analyse Sommaire des Résultats (The Population of European Cities from 800 to 1850: Data Bank and Short Summary of Results). Genéve: Librairie Droz.

Bosker, Maarten, Eltjo Buringh, and Jan Luiten van Zanden. 2013. "From Baghdad to London: Unraveling Urban Development in Europe, the Middle East, and North Africa, 800–1800." *Review of Economics and Statistics* 95(4): 1418–37.

Brecke, Peter. 1999. Violent Conflicts 1400 A.D. to the Present in Different Regions of the World. Paper presented at the 1999 Meeting of the Peace Science Society.

Burke, Peter. 2004. *Languages and Communities in Early Modern Europe*. Cambridge: Cambridge University Press.

Chaney, David M. 2015. "The Hierarchy of the Catholic Church: Current and Historical Information about Its Bishops and Dioceses."

URL: www.catholic-hierarchy.org

Clair, Colin. 1976. A History of European Printing. New York: Academic Press.

Dalby, Andrew. 1998. A Guide to World Language Dictionaries. London: Library Association Publishing.

Darby, H.C., and Harold Fullard, eds. 1970. *The New Cambridge Modern History*. Vol. 14: *Atlas*. Cambridge: Cambridge University Press.

de Vries, Jan. 1984. European Urbanization, 1500-1800. Cambridge, MA: Harvard University Press.

Febvre, Lucien, and Henri-Jean Martin. 1976. *The Coming of the Book: The Impact of Printing*, 1450–1800. 3rd ed. London: Verso.

GLOBE Task Team and others. 1999. "The Global Land One-kilometer Base Elevation (GLOBE) Digital Elevation Model."

URL: http://www.ngdc.noaa.gov/mgg/topo/globe.html

Hammond, Nicholas G.L., ed. 1981. Atlas of the Greek and Roman World in Antiquity. Park Ridge, NJ: Noyes Press.

Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig, eds. 2013. *Ethnologue: Languages of the World*. 17th ed. Dallas, TX: SIL International.

URL: www.ethnologue.com/

Minahan, James B. 2000. *One Europe, Many Nations: A Historical Dictionary of European National Groups.* Westport, CO: Greenwood Press.

Mitchell, Brian R. 2003a. *International Historical Statistics: Africa, Asia, and Oceania, 1750–2000.* 4th ed. New York: Palgrave Macmillan.

Mitchell, Brian R. 2003b. *International Historical Statistics: Europe, 1750–2000.* 5th ed. New York: Palgrave Macmillan.

Nordhoff, Sebastian, Harald Hammarström, Robert Forkel, and Martin Haspelmath, eds. 2013. *Glottolog 2.0*. Leipzig: Max Planck Institute for Evolutionary Anthropology.

URL: http://glottolog.org

Nüssli, Christos. 2011. "Euratlas.".

URL: http://www.euratlas.com/about.html

Pfaff, Steven, and Katie E. Corcoran. 2012. "Piety, Power, and the Purse: Religious Economies Theory and Urban Reform in the Holy Roman Empire." *Journal for the Scientific Study of Religion* 51(4): 757–76.

Pleiades. 2015.

URL: http://pleiades.stoa.org/home

Price, Glanville, ed. 1998. Encyclopedia of the Languages of Europe. Malden, MA: Blackwell.

Reske, Chrisoph. 2007. Die Buchdrucker des 16. und 17. Jahrhunderts im deutschen Sprachgebiet. Auf der Grundlage des gleichnamigen Werkes von Josef Benzing. Wiesbaden: Harrassowitz.

Riley, Shawn J., Stephen D. DeGloria, and Robert Elliot. 1999. "A Terrain Ruggedness Index That Quantifies Topographic Heterogeneity." *Intermountain Journal of Sciences* 6(1–4): 23–7.

Rüegg, Walter, ed. 2011. *A History of the University in Europe*. Vol. 1–4. Cambridge: Cambridge University Press.

Steinberg, S.H. 1974. Five Hundred Years of Printing. 3rd ed. Middlesex: Penguin Books.

Talbert, Richard J.A., ed. 2000. Barrington Atlas of the Greek and Roman World. Princeton: Princeton University Press.