The Diffusion of Representation: The Dominican Order in Medieval Europe

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How does representative institutions diffuse from one polity to another? Examining institutional change in medieval Europe, I investigate the effect of the Dominican order on the transition from autocratic regimes to representative city government. Specifically, I argue that the order's ideas and practices of representation diffused to the secular world, due to its persistent interaction with city elites and notables. Using different identification strategies, I offer evidence that the presence of Dominican houses fostered the development of representative city government between 1300 and 1400. My findings highlight the important role that religious orders can play in the diffusion of representation.

Introduction

Countries with representative institutions are often surrounded by other similar countries (e.g. Weyland 2010; Wejnert 2005; Elkink 2011). Efforts to explain this phenomenon have usually focused on institutional diffusion through factors such as state-elite interaction and citizen protests. However, representative ideas and practices are often propagated by specific groups. Outside of Europe, Woodberry (2011) has shown how protestant missionaries had a positive influence on the spread of representation. Yet, even though the practice of political representation initially developed in Medieval Europe, little is known about how these practices first diffused (Stasavage 2016; Finer 1997; Pitkin 1967; Pocock 1975; Skinner 2002; Manin 1997). In this paper, I examine the spread of representation between 1200 and 1800 in cities located within the former Holy Roman Empire, and provide evidence that a specific religious order was crucial in determining the extent of diffusion.

I argue that the Dominican order provided a model of representative government, which could be emulated by local secular elites. Thus, sowing the seeds for local representation. The Dominican order is a Catholic religious order, which was established in 1216. Its practices of representation were based on the Roman idea of *potestas*, which implied that a community could elect a representative to make binding decisions on their behalf. Although, the order did not invent this idea, they represented the most extensive and developed practice of representative government in the Middle Ages (Finer 1997: 1030). To ascertain if the Dominican order influenced the spread of representative city government, I employ a newly compiled dataset on the vicinity of medieval cities to Dominican houses across Europe.

Using a difference-in-difference design, I show that representative institutions were more likely to emerge when the Dominican order was present in a city. This result is robust to relaxing the common trends assumption in a variety of ways. To further account for the non-random selection of locations, I restrict my sample and comparing cities with early Dominican presence with cities where the order appeared later. Within the sample of cities selected by the order, cities with early Dominican presence have a higher chance of transitioning to representative government. My finding illustrates how non-state actors can play an important part in spreading representative government.

Furthermore, I show that the Franciscan monastic order, which appeared simultaneously with the Dominicans, did not foster secular representation. This can be interpreted as evidence for my proposed mechanism, as the Franciscans were comparable with the Dominicans in many aspects. Except, crucially, that their governmental practices were not as representative.

This result indicates that societal groups can propagate representative institutions, by providing an example that can be imitated. Thus, complementing the literature on regime diffusion, which has mostly focused on across country diffusion without specifying the actors (Weyland 2010; Wejnert 2005; Elkink 2011). They also add to the literature on civil society and democracy, which, generally, has not distinguished between the organizational make-up of societal actors (e.g. Ottaway and Carothers 2000; Beichelt et al. 2014; Hadenius and Uggla 1996; Newton 2001). In addition, my findings also contributes to our understanding of how representative institutions spread in Medieval European cities. Representation has hitherto primarily been examined at the level of larger territorial units (e.g. Stasavage 2016, Stasavage 2011 and Stasavage 2010; Møller 2017; Blaydes and Chaney 2013; van Zanden et al. 2012; Boucoyannis 2015; Kokkonen and Møller 2018). My results also highlight the important role that religious organizations can play in regime change, which has often been overlooked (Møller 2018; Woodberry 2011).

Representation in Medieval Europe

Before I present my argument, it is necessary to expand on what this paper seeks to explain. Between 1000 and 1200, practices of representation developed within Europe, which would later spread beyond the continents borders. Representation implied two things. First, that societal groups could send a representative, who was competent to make binding decisions on their behalf. Second, that those who govern should have the consent of the subjects touched by their decisions (Stasavage 2016; Manin 1997; Pitkin 1967). These practices were unique for Europe, as other contemporary societies had far less comprehensive requirements with regards to consent.

Representative practices appeared in both cities and larger territorial states. This paper focuses on the development of governance in cities, for a number of reasons. First, practices of representation were most highly developed in cities (Stasavage 2016: 147). Second, the rights of both ruler and ruled were primarily constituted and contested at the local level during the Middle Ages (Blickle 1997: 3-4; Sabetti 2004: 74-77; Møller 2017: 196). Finally, most previous studies of this topic have focused on the causes of representative institutions within larger territorial states by, for example, looking at the emergence of parliaments in Britain or Spain (Stasavage 2016, Stasavage 2011 and Stasavage 2010; Møller 2017; Blaydes and Chaney 2013; van Zanden et al. 2012; Boucoyannis 2015; Kokkonen and Møller 2018). As a consequence, attempts to explain why local representative institutions emerged have been rarer.¹

A local representative institution is understood in a broad sense. It is an institution within a small polity that has the right to regulate core policy areas, such as taxation, judicial affairs and defense. In addition, the institution must be constituted of inhabitants from the city in question, which are chosen by the citizens themselves (Stasavage 2014: 342). Thus these institutions, in a minimal sense, had to be made up of representatives of at least part of the citizenry. *City air makes you free* is a Medieval German saying², which hints at the political freedom that could be achieved by coming to the city.

Bosker et al. (2013b) finds that representative government promoted city growth. Stasavage (2014) and Wahl (2018) moderates this finding, by showing that they primarily increased growth during the medieval period. Guiso et al. (2016) show that a legacy of local representative governance explain differences in contemporary social capital in Italy. Angelucci et al. (2017) provide evidence that English boroughs with medieval representation had more inclusive elections and were more supportive of franchise extensions in the nineteenth century. Jacob (2010) finds that former Free or Imperial German cities have higher current levels of economic development and social capital. More generally, a history of representation has been shown to increase the level of democratization today (Bentzen et al. 2017; Giuliano and Nunn 2013; Ertman 1997; Downing 1992; Blockmans 1978).

Why did such institutions appear in European cities during the Middle Ages and not elsewhere? Several scholars suggests that the Church was instrumental in reviving Roman ideas of representation and promoting city autonomy (Møller 2018; Belloc et al. 2016; Tabacco 1989; Post 1964). Additionally, the weakness of European monarchs allowed cities to gain independence and establish representative institutions (Stasavage 2016; Blockmans 1978). Finally, Abramson and Boix (2017) suggests that the introduction of parliaments in medieval Europe was endogenous to economic development, which may also hold true for representation at the city level.³ In this paper I don't

¹For exceptions see (Belloc et al. 2016; Tabacco 1989).

 $^{^{2}}Stadtluft macht frei (Haase 1976)$

³Although this can be disputed as, for example, middle eastern cities were generally larger in the period leading

attempt to explain the initial emergence of representative city government, but rather its diffusion across Europe.



Source: Based on the *Election*, *InstitutionalizedBurgherRepres* and *GuildParticipationIndex* variables from (Wahl 2016)

The first large wave of transitions in governance was between 1100 and 1200, and it occurred mostly in Italy, and to some extent France. In the sample of 405 Northern Italian cities studied by Guiso et al. (2016) and Belloc et al. (2016), all the cities that transition to representative government (*commune*) have done so before 1239. Thus, the Dominican order is unlikely to have played a role in this first wave of representative government. Using my primary source of data on city government (Wahl 2016), I plot the development in the number of cities with representative government in the Holy Roman Empire in the figure above. The subsequent spread of representation, which is marked by the dashed lines in figure 1, is the focus of this paper. It encompasses cities in the former Holy Roman Empire, which are located within contemporary Germany, Austria, France, Belgium, Poland and the Netherlands. I propose that the Dominican order was consequential in determining the diffusion of representative governance to these areas. To elucidate this contention, I begin with a short primer on the history of the order. This is followed by an outline of why the Dominicans fostered lay representation in this period in particular.

up to the introduction of representative government in European cities (Bosker et al. 2013b).

The History of The Dominican Order

Between 1200 and 1300, the mendicant movement appeared and rapidly spread to the whole of Europe. The mendicant movement encompassed a series of orders that emphasized poverty, travelling and immersion in the life of the secular world in order to preach and combat heresy. This represented a break with previous monastic orders that renounced secular pursuits and cut themselves off from worldly affairs. The Dominican order was a prominent part of this movement (Southern 1970: 282-83).

The origins of the Dominican order goes back to an encounter in Montpellier in 1206. Three Cistercian abbots, on a failing mission to combat heresy, came across a Spanish bishop. A member of the bishops retinue, Dominic, perceived that the failure of the mission was caused by the pomp of the abbots. To solve this problem, and more efficiently combat heresy, he worked to institutionalize a new order. The new order aimed to practice a simpler life within an universal organization. In 1216, Dominic had succeeded in securing papal approval for his order. Around 1230, the Dominican order, as a result of its competition with the Franciscan order, was beginning to spread to most of Europe (Southern 1970: 279-80, 285-86).

After securing papal approval in 1216, Dominic outlined the principles that came to guide the organization of his order. Based on these principles the first Chapter General meeting adopted the enduring representative structure of the order in Bologna in 1220. The order was to be ruled by a chapter general and a master general. The master general was elected by the provincial priors and two friars from each province. The chapter general was made up of assemblies, whose composition changed each year. Some years they were composed of delegates from each province, in other years it was provincial priors. The priors were chosen via election by the friars of each convent. In addition, the priors had to consult the conventual chapter for most significant issues. The territorial provinces were ruled by a provincial chapter, which was made up of two priors and two friars from each community, from which four members were regularly chosen to prepare legislation. These representative were chosen via elections. Their integrity was taken seriously, as the chapters ensured that no friar was deprived of his vote.⁴ Canvassing votes was also forbidden.⁵

⁴or, equivocally, transferred before an impending election.

⁵Sometimes attempts were made to interfere elections. For example, two vicars of Bohemia removed multiple priors from office and transferred friars repeatedly to ensure a provincial election. However, after they were discovered the

Thus, the order from top to bottom was ruled by a system of representatives (Tunmore 1941: 482-83; Hinnebusch 1965: 217-232; Lawrence 1994: 82-83; Finer 1997: 1031).

Each representative in the order was said to possess *plena potestas*. Drawn from the Roman legal tradition, it implied the right of a community to elect an representative to make decisions on their behalf. Possessing *plena potestas* meant that the delegate was able to litigate, accept a sentence and negotiate settlements or even judge. All without consulting his constituents (Showalter 1973: 561-62; Tierney 1995: 86; Post 1964: 94, 109-10).⁶ Consequently, although the Dominican order may not have invented the concept of *plena potestas*, they represented the most extensive and developed practice of representative government within the Western world (Lawrence 1994: 82; Tierney 1995: 83; Finer 1997: 1030-31). Nevertheless, the order did not remain as such. Beginning in the late fourteenth century, the chapters stopped meeting annually, and the pope increasingly interfered with elections. The orders system of government became progressively more autocratic, as power was concentrated in the hands of a small elite (Hinnebusch 1965: 240-42; Gailbraith 1923: 190-91; Showalter 1973: 565-66).

In the next subsection, I discuss how, and when, these representative practices were likely to diffuse to the secular world, thereby laying the ground for local representative institutions.

Diffusion to the Secular World

Diffusion denotes the spread of practices within a social system, whereby a receiver, in this case a city government, takes up a practice from a source, here the Dominican order (Wejnert 2005: 55).

Beginning with Barker (1913), it has been argued that the representative organization of the Dominican order provided a direct model for national parliaments.⁷ Yet, it is more likely that these two systems of representation had a mutual influence on each other. Nevertheless, the system of representation within the Dominican order was by far the most formalized and penetrative (Finer 1997: 1030). Thus, I will argue that the diffusion of representative ideas and practices happened

general chapter excluded them from all office for the next four years (Hinnebusch 1965: 217).

⁶It should be noted that the Dominican order was not the first to employ *plena potestas* (Tierney 1995: 83). The revival of it within the Church was most likely a papal invention (Post 1964: 108-9; Tierney 1995: 86).

⁷However, the exact causal relationship between representation in national parliaments and within the Dominican order is disputed (see e.g. Pollard 1914; Tunmore 1941; Thompson 1953).

primarily from the order to the secular world.

In the following, I contend that governmental change at the city level is predominantly determined by the actions of economic and political elites. Next, I outline the conditions under which representative practices are likely to diffuse between organizations, and discuss why it is probable that ideas and practices of representation were transmitted to secular elites from the Dominican order, thereby explaining the spread of medieval cities with representative government.

Before the emergence of local representative institutions, medieval cities were often ruled by either a small number of wealthy families, a bishop, or a prince. As cities grew, these rulers were challenged by merchants and other leading citizens, who wanted to secure property rights and extend political rights to a larger part of the city population. As such, the transition to representative government required enough to power to wrest control from the previous rulers (Epstein 2000: 280; Johanek 2000: 306-7; Stasavage 2014: 343; Wahl 2016: 68-69). Therefore, governmental change was mainly driven by the actions of political and economic elites.

Whether governmental practices diffuse between organizations depends on the proximity of and the frequency of interaction between source and adopter (Wejnert 2005: 56). Since it was expensive to travel long distances in medieval Europe, geographical proximity limited links between cities. After the collapse of the Roman Empire, the road network of Europe had deteriorated (Spufford 2002: Chp. 2). As a result, transporting goods across large distance was difficult. So trade was primarily local or regional (Hunt and Murray 1999: 26-29). The Dominican order insisted that its members travel by foot, which increased the costs of travelling. Proximity was therefore a necessary condition for the diffusion of governmental ideas and practices between the order and the secular world. I therefore examine the allocation of Dominican houses.

The order had several criteria for city selection. In opposition to the earlier Benedictine monks, who preferred rural seclusion, the Dominican order had an eye for cities with an active scholarship, culture and commerce. The first and second condition satisfied the order's interest in intellectual pursuits, while the last implied a number of attractive city characteristics for the order. Wealthy merchants could provide economic support for the order in exchange for religious services. Additionally, the proliferation of commerce provided a marketplace where the order could find an audience (Lawrence 1994: 72, 80, 102-3; Garcia-Serrano 1997: 23-25; Zaldivar 2012: 175; Hinneb-usch 1965: 120-22, 279). In Castile, for example, the important road to Santiago, which provided

ample opportunities for preaching, connected a number of cities that the order chose as locations for its houses (Garcia-Serrano 1997: 26). As a consequence, the proximity criteria, which was required for diffusion, was certainly fulfilled with regards to the Dominican order.

Nevertheless, while spatial closeness enables interaction it does not in itself entail actual links between source and adopter. Links require persistent and continuous interactions between organizations, in order to establish dependable relationships. Research on social contact shows that continuous interaction is more likely between similar individuals (e.g. Verbrugge 1977; Currarini et al. 2010; Centola and van de Rijt 2015; McPherson et al. 2001). The diffusion of governmental practices was thus more likely if members of the Dominican order were akin to the elites of medieval cities, as this would have made frequent interaction more likely.

The ideal Dominican friar, in the eyes of the founder, was well-educated and competent to either elect or serve as a representative within the order. The order even boasted that they valued intellectual engagement equally with religious exercises in the pursuit of spiritual growth. Consequently, the order primarily accepted and attracted men that were well versed in canon law or theology - in other words, university men. These admission practices naturally resulted in a membership mostly comprised of men from wealthy families (Showalter 1973: 561, 566-67; Lawrence 1994: 69, 72-75; Hinnebusch 1965: 282-87). As a result, continuous interaction between the order and city elites was likely. Indeed historical evidence supports that the Dominican order was quick to establish relations with both the middle and upper classes of nearby cities (Powell 2008: 566-68). Moreover, the Dominicans also formed close relations with merchants by legitimizing commerce in exchange for donations or using the marketplace as a spot for preaching (Garcia-Serrano 1997: 3, 24; Zaldivar 2012: 189-91). The Dominicans were therefore often in close contact with both the political and economic elites of cities (Lawrence 1994: 166-81).

In addition, members of the order often performed administrative tasks for the secular government, which further ensured interaction between members of the order and political elites. Dominican friars were attractive as administrators in the eyes of secular rulers for a number of reasons. First, they were largely disinterested in personal wealth and patronage. They were also highly educated, well versed in many languages and they had contacts around the world (Lawrence 1994: 173-75; Bonacini 2013: 116-118; Casagrande 2013: 184, 187-88, 194; Pincelli 2013: 127; Zaldivar 2012: 201). Thus, the diffusion of ideas and practices from the order to the secular world was likely, as administrative tasks often brought together members of the order and secular elites.

The historical evidence is to sparse to document a clear case of diffusion. Yet, a particularly interesting example is the city of Perugia. When the leader of the city was up for election in 1260, two friars from the Dominican order were entrusted with administering the election. In 1303, the city transitioned to governance relying on guild participation. Again the Dominican order acted as administrators during the election of officials (Casagrande 2013: 182-83, 189-90). This was not only a curiosity of Italian cities, as for example the convent in Barcelona hosted the city's council meetings in the latter part of the thirteenth century. Several of the council members in Barcelona also had close connections to the order (Zaldivar 2012: 178, 183-88, 203).⁸ Similarly, the town of Macon hosted its assemblies in its Dominican convent (Röhrkasten 2006: 135). Moreover, during times of political crisis the Dominican order often functioned as arbiters of peace (Casagrande 2013: 195; Lawrence 1994: 177). Of course, these examples do not prove causation. However, they illustrate the many links between secular elites and the Dominican order, which suggest possible diffusion of governmental practices.

The presence of the Dominican order meant that secular elites were likely to be exposed to and inspired by the governmental ideas and practices of the order. Not only was the order located in the vicinity of medieval cities, it also engaged in continuous interaction with both political and economic elites. I therefore expect that ideas and practices of representative government spread from Dominican friars to secular elites, hereby increasing the probability that a city establishes representative institutions. However, due to the autocratization within the order from the late fourteenth century and onwards, I do not expect it to have a positive influence on representative city government after this century. To summarize, I put forth the following empirically assessable prediction concerning the spread of representation in Medieval Europe:

Before the fifteenth century, cities in the presence of Dominican houses were more likely to establish local representative institutions

 $^{^{8}}$ Due to a dearth of sources, there is unfortunately no information on why the order served as hosts for the council meetings nor what role it played in these meetings (Bensch 1995).

Data

To assess the relationship between Dominican houses and the emergence of local representative institutions, I rely on a dataset that covers medieval cities within the Holy Roman Empire circa 1500 AD, with city-century as its unit of analysis. To measure representative institutions I use three indicator variables on city government from (Wahl 2016). The dataset covers 325 cities from 800 to 1800, their geographical distribution is depicted in the appendix.⁹ The first indicator is equal to one if a city is governed by a council, which members are elected craftsmen or guild representatives. The second is equal to one if a city is governed by a community of citizens that meets regularly, which includes representatives of different citizen groups. The final indicator is equal to one if a city was governed by a council elected by citizens rather than city officials. The dependent variable, *transition_{it}*, is equal to one if city *i* switches to either type of representative government in century *t*. Thus, the city drops out of the sample if its government becomes representative, unless it either switches governance type or reverts to an autocratic city government. This dataset is used, as it has the most precise coding procedure. As a robustness check, I repeat the main analysis using the (Bosker et al. 2013b) dataset, which covers the whole of Europe.¹⁰

When explaining the spread of representative institutions in medieval Europe, the usual suspects are economic development and the influence of the Church in general (Epstein 2000: 279-80; Møller 2018). Thus, these constitute core alternative explanations. The subsequent section describes how these factors are accounted for. In my baseline sample, I have 284 transitions to a representative city government.

⁹The century 1100 is missing for all cities.

¹⁰Employing the *commune* variables as an indicator of representative city government. The variable also captures government based on representatives, however its coding procedure is rough. For example, the construction of town halls and the granting of city charters are used as proxies for representative government (Bosker et al. 2013a: 10-11).

Figure 2: Dominican houses before 1300



Note: The grey area denotes the approximate territory of the Holy Roman Empire in 1500 AD (Nüssli and Nüssli 2008). Blue dots represent Dominican houses established before 1250. Red dots represent houses established between 1250 and 1299.

To gauge the impact of the Dominican order, I rely on a map with coordinates for the Dominican houses that were established before 1300 (presented at McCormick et al. 2018; and based on Jedin et al. 1987). Using data on the coordinates of medieval cities from (Wahl 2016), I regard the order as present if a Dominican house is established within ten kilometres of the city in question.¹¹ Based on the resulting 64 cities, I construct a binary indicator for the orders presence, dominican_{i,t}. As the order appeared in 1216, it is equal to zero if t < 1300. The indicator is equal to one if t = 1300, and a house was established before 1250 in city *i*. It is equal to one if t = 1400, and the house was settled between 1250 and 1299. The indicator is set to zero from t = 1500 and onwards, following from the autocratization of the orders mode of government. The geographical and temporal spread of Dominican cities within the Holy Roman Empire is presented in figure 2 above.

¹¹Varying this cut-off results in qualitatively similar findings.

Empirical Strategy

I construe the relationship in a difference-in-difference setup. To analyse the effect of the Dominican order on the likelihood of transitioning to representative city government, I employ the following baseline specification:

$$transition_{i,t} = \alpha_i + \gamma_t + \delta dominican_{i,t} + \epsilon_{i,t} \tag{1}$$

The coefficient δ , which is the quantity of interest, capture the effect of having the order present. α_i and γ_t are city-fixed-effects, and century-fixed-effects, respectively. $\epsilon_{i,t}$ is the error term. The city-fixed-effects account for any unobserved time-invariant confounders, which impacts both the location of Dominican houses and the likelihood of transitioning to representative city government. For example, a Roman legacy or advantageous accessibility. Century-fixed-effects mitigate time shocks that are common across cities, such as the dissolution of the Holy Roman Empire. δ can be given a causal interpretation if cities with and without the Dominican order would have followed a similar trend in governance in a counter-factual world without the order. This is also called the common trends assumption, see (e.g. Angrist and Pischke 2008). Given the number of fixed-effects (and for interpret-ability), this specification is estimated using a linear probability model (LPM). As a robustness test, the main models are rerun adopting the conditional logit estimator. Standard errors are clustered at the city level. To handle potential spatial correlation of the error terms of unknown form, I also present Conley's standard errors. They allow for spatial correlation that decrease as the distance between cities increases, and for temporal correlation (Conley 1999; Conley and Molinari 2007).

The common trends assumption is relaxed in additional models. The Dominican order selected urban centers, which were active in culture, intelligentsia and trade, as their base of operations (Lawrence 1994: 72, 80, 102-3; Garcia-Serrano 1997: 23-25; Hinnebusch 1965: 279). These factors have been linked to the proliferation of representative institutions (see e.g. Abramson and Boix 2017; Epstein 2000). To mitigate bias stemming from the usage of these selection criteria, I control for a number of potential observable characteristics pertaining to these criteria ($\beta \mathbf{X}_{i,t}$). All possible time-variant confounders are lagged a century, t - 100, to minimize the risk of post-treatment bias and reverse causality (Rosenbaum 1984).

To accommodate selection based on economic development, I use the (Bairoch et al. 1988) dataset on city size to create an indicator for if a city in my sample has more than 10.000 inhabitants.¹² To capture if the city is an urban center, I create another indicator equal to one if a city has more than 50.000 inhabitants in a given century. In order to take selection based on cultural and intellectual activity into account, I include a measure for the distance to the nearest university and capital in each century. As discussed, Dominican houses could be established in areas where the Church was already strong, thus conflating the effect of the two.¹³ Thus, I also control for the distance to the nearest bishop. Moreover, given that the first cities governed by representatives emerged before the Dominican order, nearby cities with such government may have attracted the Dominican order and served as inspiration for other cities. Consequently, I control for the distance to the nearest city with a representative government. All data is from (Bosker et al. 2013b). The representative institutions data from (Bosker et al. 2013b) is used, as cities outside of the Holy Roman Empire might also have served as an inspiration. In additional models all measures are interacted with century-fixed-effects, thus allowing heterogeneous effects over time.

In these models, I also include four spatial factors that are interacted with century-fixed-effects, to allow for differential effects across centuries. To flexibly control for geographical factors that might affect the location of the Dominican order and a city's propensity to transition, I control for a city's latitude and longitude. Trade, and Atlantic trade in particular, also became increasingly important during the period under study (see Acemoglu et al. 2005), I therefore include a city's distance to the nearest natural harbor or navigable river. Data on habors is from the "World Port Index" (NGIA 2017), data on rivers is from the European Environmental Agency (EEA 2018).¹⁴ Having a Roman legacy might also make it more likely that a city introduces representative practices based on Roman law. To account for this I use an indicator variable for whether a city is located within ten kilometres of a Roman city (data from Hanson 2016).

Finally, the common trends assumption is relaxed further, by interacting modern country location with a linear time trend. Thus, only looking at deviations in governance that cannot be explained by macro trends. However, this might induce post-treatment bias, as the location of modern borders is a result of, among other things, city developments in the period under study. Therefore, I match each city to the province or duchy it was located within before the appearance

¹²This is done as there, unfortunately, is no direct population figures available for many of the cities in the sample. The idea is that sufficiently large cities are unlikely to have missing population data.

¹³Historical evidence also supports that bishops often acted as benefactors that encouraged the establishment of Dominican houses (Hinnebusch 1965: 255).

¹⁴A harbor is identified as natural if it is classified as coastal natural, river natural, river basin or lake/canal.

of the order (Nüssli and Nüssli 2008)¹⁵, and allow each macro unit a differential effect over time. I present my results in table 1 below.

Results

As a preliminary analysis, I run a simple regression of transition to representative city governance on the presence of the Dominican order. The coefficient is shown in column (1). Here it can be seen that cities in the proximity of the order were 32.9%-points more likely to transition. Thus, confirming my expectation. Yet, there is a risk that this observed differences in the likelihood of transitioning is driven by confounding factors or a time trend. I therefore turn to the results from the difference-in-difference models, which are presented in the remaining columns.

	(1)	(2)	(3)	(4)	(5)	(6)
Dominican (δ)	0.329	0.237	0.236	0.228	0.237	0.237
	$(0.0604)^{***}$	$(0.0705)^{***}$	$(0.0695)^{***}$	$(0.0714)^{**}$	$(0.0728)^{**}$	$(0.0711)^{**}$
	$[0.0599]^{***}$	$[0.0565]^{***}$	$[0.0537]^{***}$	$[0.0566]^{***}$	[0.0570]***	$[0.0561]^{***}$
City and Century FE	No	Yes	Yes	Yes	Yes	Yes
Time variant controls	No	No	Yes	Yes	Yes	Yes
Controls \times Century FE	No	No	No	Yes	Yes	Yes
Modern country \times Time	No	No	No	No	Yes	No
Province in 1200 \times Time	No	No	No	No	No	Yes
Observations	1642	1642	1642	1642	1642	1642

Table 1: Difference-in-Difference Estimates

Estimated using OLS. 325 cities. Standard errors clustered by city in parentheses. Conley standard errors in brackets. * p < 0.05, ** p < 0.01, *** p < 0.001

The difference in likelihood diminish when city and century-fixed-effects are introduced in column (2). Cities with the Dominican order present are now 23.7%-point more likely to instate representative government. The estimate remains substantially unaltered when controls for city size and distance to the nearest capital, university, commune and bishop are included in column (3). The estimate drops slightly to 22.8%-points in column (4), when the aforementioned factors

¹⁵Called 2nd level divisions in the Euratlas. They denote territorial units under the control of the main authority of their state. Often called provinces or duchies. The cities are matched to 2nd level divisions in 1200. Examples are Bavaria, Franconia and Lusatia.

and geographical characteristics are allowed a heterogeneous impact across centuries. The coefficient is qualitatively unchanged when accounting for confounding at the macro-polity level in column (5) and (6). How substantial is the impact of the Dominican order? Based on the last model, cities without the order had a 16.4%-point chance of switching to representative city government. In comparison, Dominican cities had a 40%-point chance of transitioning - more than twice as high. The difference is thus qualitatively important. To ensure that these results are not driven by functional form assumptions, I rerun the analysis using conditional logistical regression. These models, which are shown in the appendix, confirm my findings.¹⁶

Placebo tests

For the results in table 1 to identify an effect, cities with and without the Dominican order present should, conditional on my controls, have a similar trend in transitioning to representative city government in a counter-factual scenario without the order. Thus, one might worry that cities without the Dominican order present make for poor counter-factuals, given that their propensity to transition is different due to underlying variation in unmeasured characteristics. The common trends assumption is not directly testable. However, I can probe its plausibility by estimating if cities in the vicinity of the Dominican order had a different probability of gaining representative government before the order appeared. I therefore rerun my main models using a lagged version of my indicator for Dominican presence. Hence, estimating the impact of being in the vicinity of the order in the future on the likelihood of transitioning.

The results are presented in the appendix. In column (1), without any controls or city and century-fixed-effects, I do find that future Dominican cities are more likely to transition. However, in all other models there is no distinguishable difference in the likelihood of achieving representative city government between cities where the order is present in the future and non-Dominican cities. This supports my conclusion that the order fostered secular representation.

Did the order spread representative government through its own example? An alternative interpretation is that my results reflect a diffusion of representative governance between cities, which was transmitted through the well-travelled Dominicans. To test if this is the case, I compare the order to another contemporary monastic movement - the Franciscans. Like the Dominicans, the

 $^{^{16}}$ model (4)-(6) could not be estimated using conditional logit.

Franciscans was an urban order, which spread to many cities across Europe. Their mode of organization could not, however, match the Dominicans with regards to representation (Lawrence 1994: 26-64; Southern 1970: 272-299). Using data on the location of franciscan houses in 1300 (presented at McCormick et al. 2018; and based on Jedin et al. 1987), I construct a binary indicator equal to one in t = 1400 if a city is within ten kilometres of a Franciscan house.¹⁷ Then I rerun my main models using this indicator instead. If the alternative interpretation is correct, I would also expect positive relationship between the Franciscans and representative city government. Conversely, if representation diffused through the Dominican order's example, I would not expect there to be a relationship.

	(1)	(2)	(3)	(4)	(5)	(6)
Franciscan (δ)	0.273	0.0801	0.0782	0.0692	0.0542	0.0685
	$(0.0482)^{***}$	(0.0547)	(0.0549)	(0.0555)	(0.0566)	(0.0562)
	$[0.0498]^{***}$	[0.0478]	[0.0465]	[0.0481]	[0.0483]	[0.0486]
City and Century FE	No	Yes	Yes	Yes	Yes	Yes
Time variant controls	No	No	Yes	Yes	Yes	Yes
Controls \times Century FE	No	No	No	Yes	Yes	Yes
Modern country \times Time	No	No	No	No	Yes	No
Province in 1200 \times Time	No	No	No	No	No	Yes
Observations	1642	1642	1642	1642	1642	1642

Table 2: Placebo test: Franciscans

Estimated using OLS. 325 cities. Standard errors clustered by city in parentheses. Conley standard errors in brackets. * p < 0.05, ** p < 0.01, *** p < 0.001

As before, only the model without any controls or fixed-effects returns significant results. In all other specifications, I find no discernible relationship between the Franciscan order and representative city government. This suggest that it is not the general presence of urban monastic orders that explains my results, but rather the representative example set by the Dominican order.

Exploiting the timing of Dominican presence

One could still contend that the Dominican's strategic selection of cities might bias my findings. To accommodate this worry I begin by restricting my sample to cities selected by the order between

 $^{^{17}128}$ cities had a house within ten kilometres in 1400.

1216 and 1299. I then compare the likelihood of transitioning in to representative city government in 1300 in cities where the order was present before 1250 with cities where it first appeared in the latter part of the century.¹⁸ This allows me to identify the effect of early Dominican presence under the assumption that the timing of the Dominican order is unrelated to any city characteristic that might also affect a city's propensity to establish representative government. Based on my argument, I would expect that early Dominican presence creates additional opportunities concerning the diffusion of representative ideas and practices.

My explanatory variable is an indicator equal to one if a city is within ten kilometres of a Dominican house that was established before 1250. The dependent variable is an indicator for if a city transitioned to representative government in 1300. One could worry that early Dominican cities were more accessible, and thus had better trade opportunities than cities where the order appeared after 1250. To prod if this is the case I also run a model where I control for geographical factors. Alternatively, I consider if early Dominican cities had more advantageous economic or cultural characteristics, by controlling for these factors. Table 3 shows the resulting estimates.

Column (1) shows that Dominican cities where the order appeared before 1250 are 28.2%-point more likely to achieve representative city government by 1300. This estimate remains substantially unaltered when controlling for geographical factors, such as latitude and longitude. Moreover, accounting for social characteristics, such as city size and the distance to a university, also leaves the estimate intact. Thus, it is plausible that the timing of the Dominican's presence is unrelated to factors that determine a city's likelihood of transitioning to representative government.

 $^{^{18}\}mathrm{The}$ 1250 cut-off is based on the demarcation used by my data source.

	(1)	(2)	(3)	(4)
Dominican before 1250	0.282	0.314	0.271	0.277
	$(0.105)^{**}$	$(0.103)^{**}$	$(0.109)^*$	$(0.105)^*$
	$[0.100]^{**}$	$[0.097]^{**}$	$[0.092]^{**}$	$[0.100)^{**}$
Latitude		-0.0451		-0.143
		$(0.0220)^*$		$(0.0474)^{**}$
		[0.020]*		$[0.031]^{**}$
Longitude		0.0326		0.0143
		$(0.0135)^*$		(0.0291)
		$[0.008]^{***}$		[0.021]
Dist. river/harbour		0.189		0.149
		(0.145)		(0.149)
		$[0.069]^{**}$		$[0.072]^*$
Roman city			-0.218	-0.416
			(0.165)	$(0.177)^*$
			[0.156]	$[0.159]^*$
>10.000 inhabitants in 1200			0.0212	0.203
			(0.164)	(0.152)
			[0.163]	[0.136]
Dist. bishop in 1200			-0.104	-0.146
			(0.135)	(0.123)
			[0.085]	$[0.054]^{**}$
Dist. commune in 1200			-0.0939	-0.0765
			(0.0878)	(0.0841)
			$[0.045]^*$	[0.048]
Dist. university in 1200			0.0498	0.136
			(0.0438)	(0.0714)
			[0.039]	$[0.056]^*$
Dist. capital in 1200			-0.0861	0.00938
			(0.0533)	(0.0733)
			$[0.028]^{**}$	[0.073]
Observations	69	69	69	69

Table 3: Within Dominican cities comparison in 1300

Estimated using OLS. 20 transitions. Robust standard errors in parentheses. Conley standard errors in brackets. * p<0.05, ** p<0.01, *** p<0.001

No city chosen by the dominican had above 50.000 inhabitants in 1200.

Assessing the Robustness of the Findings

A possible objection to my results, is that they are driven by possible measurement error due to the lack of precise historical sources. To mitigate this worry I test my relationship using a second dataset on the type of government in medieval cities. Specifically, I measure local representative government using the *commune* measure from (Bosker et al. 2013b). I duplicate my specifications from table 1 with the same controls. The results are presented in the appendix. As before I find that, the presence of the Dominican order seems to increase the likelihood that a city institutes representative government. Specifically, cities are approximately 8-13%-points more likely to transition to representative government when the Dominican order is present. Consequently, my finding is supported across two different datasets. Hereby alleviating worries of unstable findings due to measurement error.

Yet, one might also worry that my results are spatially dependent, as it may be the same cities within the Holy Roman Empire that are driving the relationship in both datasets. Therefore, I rerun similar specifications where all cities located within the Holy Roman Empire circa 1500 are excluded. The results stand, they are shown in the appendix. In fact, the estimates are even larger for cities outside of the Holy Roman Empire, as Dominican cities are 11-14%-point more likely to introduce representative city government.

Conclusion

Using a dataset on regimes in 325 European cities during the period 1200-1800, I have analysed the effect of the Dominican order on institutional change. The analysis show that the presence of the order increased a city's likelihood of transitioning from autocratic to representative government. This result holds across different datasets and areas of Europe. I argue that this pattern reflects the diffusion of representative ideas and practices from the order to secular elites. The Dominican order was organized from the base to the top on principles of representation. Local houses often interacted with both the economic and political elites of nearby cities. Subsequently, secular leaders could gain inspiration from the orders mode of governance and introduce representative institutions during times of institutional change.

Further supporting this argument, I show that a contemporary monastic order, the Franciscans, did not promote representative city government. The Franciscans did not have representative practices that were comparable with the Dominicans, thus they could not serve as an inspiration for secular institutional change.

These results demonstrate that societal groups can increase the likelihood that local elites adopt representative institutions, by providing an example that can be imitated. Thus, complementing both the literature on regime diffusion, which to date has been concerned with diffusion from one macro regime to another (Weyland 2010; Wejnert 2005; Elkink 2011), and the literature on civil society and democracy, which, for the most part, has not distinguished between the organizational make-up of societal actors (e.g. Ottaway and Carothers 2000; Beichelt et al. 2014; Hadenius and Uggla 1996; Newton 2001). The findings also adds to our understanding of how representative institutions spread in Medieval European cites (Belloc et al. 2016; Tabacco 1989; Stasavage 2016; Blockmans 1978). Finally, the results also highlight the important, but often overlooked, role that religious organizations can play in regime change (Møller 2018; Woodberry 2011).

Future research should investigate the capability of societal groups with representative governance to promote similar forms of governance in modern regimes at both the macro and micro level.

References

- Abramson, Scott and Carles Boix (2017). Endogenous parliaments. Working paper Retrieved from:(http://cpd.berkeley.edu/wp-content/uploads/2017/01/abramson`boix`v17`sfa.pdf).
- Acemoglu, Daron, Simon Johnson, and James Robinson (2005). The rise of europe: Atlantic trade, institutional change, and economic growth. American Economic Review 95(3), 546–579.
- Angelucci, Charles, Simone Meraglia, and Nico Voigtländer (2017). The medieval roots of inclusive institutions: From the norman conquest of england to the great reform impact. *NBER Working Paper Series 23606.*
- Angrist, Joshua D. and Jörn-Steffen Pischke (2008). Mostly Harmless Econometrics. NJ: Princeton University Press.
- Bairoch, Paul , Jean Batou, and Chevre Pierre (1988). The Population of European Cities, 800-1850. Geneve: Droz.
- Barker, E. (1913). The Dominican Order and Convocation. Oxford: OUP.
- Beichelt, Timm, Irene Hahn-Fuhr, Frank Schimmelfenning, and Susann Worschech (2014). Civil Society and Democracy Promotion. NY: Palgrave macmillan.
- Belloc, Marianna, Francesco Drago, and Roberto Galbiati (2016). Earthquakes, religion, and transition to self-government in italien cities. The Quarterly Journal of Economics 131(4), 1875–1926.
- Bensch, Stephen P. (1995). Barcelona and its Rulers, 1096-1291. Cambridge: Cambridge University Press.
- Bentzen, Jeanet , Jacob Gerner Hariri, and James Robinson (2017). Power and persistence: the indigenous roots of representative democracy. *The economic journal Forthcoming*.
- Blaydes, Lisa and Eric Chaney (2013). The feudal revolution and europe's rise: Political divergence of the christian west and the muslim world before 1500 ce. American Political Science Review 107(1), 16–34.
- Blickle, Peter (1997). Resistance, Representation and Community. Oxford: Oxford University Press.

- Blockmans, Wim (1978). A typology of representative institutions in late medieval europe. Journal of Medieval History 4, 189–215.
- Bonacini, Pierpaolo (2013). Employment of religious in the administration of the Modena commune. in Churchmen and Urban Government in Late Medieval Italy, 1200-1450. Cambridge: Cambridge University Press, ed. Frances Andrews and Maria Agata Pincelli.
- Bosker, Maarten , Eltjo Buringh, and Jan Luiten van Zanden (2013a). Data appendix for: From baghdad to london. *Published online at https://sites.google.com/site/maartenbosker2/*.
- Bosker, Maarten , Eltjo Buringh, and Jan Luiten van Zanden (2013b). From baghdad to london: unravelling urban development in europe and the arab world 800-1800. *Review of Economics* and Statistics 95(4), 1418–1437.
- Boucoyannis, Deborah (2015). No taxation of elites, no representation: State capacity and the origins of representation. *Politics and Society* 43, 303–32.
- Casagrande, Giovanni (2013). Religious in the service of the commune: the case of thirteenth and fourteenth century Perugia. in Churchmen and Urban Government in Late Medieval Italy, 1200-1450. Cambridge: Cambridge University Press, ed. Frances Andrews and Maria Agata Pincelli.
- Centola, Damon and Arnout van de Rijt (2015). Choosing your network: social preferences in an online health community. *Social science and medicine* 125, 19–31.
- Conley, Timothy (1999). Gmm estimation with cross sectional dependence. Journal of Econometrics 92(1), 1–45.
- Conley, Timothy and Francesca Molinari (2007). Spatial correlation robust inference with errors in location or distance. Journal of Econometrics 140(1), 76–96.
- Currarini, Sergio, Matthew Jackson, and Paolo Pin (2010). Identifying the roles of race-based homophily in high school friendship network formation. *Proceedings of the national academy of sciences* 107, 4857–61.
- Downing, Brian (1992). The Military Revolution and Political Change. Princeton: Princeton University Press.

- EEA (2018). Wise large rivers and lakes. European Environment Agency https://www.eea.europa.eu/data-and-maps/data/wise-large-rivers-and-large-lakes/.
- Elkink, Johan (2011). The international diffusion of democracy. Comparative Political Studies 44(12), 1651–1674.
- Epstein, Stephan R. (2000). The Rise and Fall of Italien City-States. Viborg: The Royal Danish Academy of Sciences and Letters: in A Comparative Study of Thirty City-State Cultures. Ed. Mogens Herman Hansen.
- Ertman, Thomas (1997). Birth of the Leviathan. New York: Cambridge University Press.
- Finer, Samuel E. (1997). The History of Government II. Oxford: Oxford University Press.
- Gailbraith, G. R. (1923). *The Constitution of the Dominican Order*. Manchester: The University of Manchester Press.
- Garcia-Serrano, Francisco (1997). Preachers of the City: The Expansion of the Dominican Order in Castile. New Orleans: University Press of the South.
- Giuliano, P. and N. Nunn (2013). The transmission of democracy: From the village to the nationstate. American Economic Review Papers and Proceedings 103(3), 86–92.
- Guiso, Luigi , Paola Sapienza, and Luigi Zingales (2016). Long term persistence. Journal of European Economic Association 14(6), 1401–1436.
- Haase, C. (1976). Die Stadt des Mittelalters. Wissenschaftliche Buchgesellschaft.
- Hadenius, Axel and Fredrik Uggla (1996). Making civil society work, promoting democratic development. World development 24 (10), 1621–1639.
- Hanson, J. W. (2016). An Urban Geography of the Roman World, 100 BC to AD 300. Oxford: Archaeopress Roman Archaeolohy 18.
- Hinnebusch, William A. (1965). The History of the Dominican Order. NY: Alba House.
- Hunt, Edwin and James Murray (1999). A History of Business in Medieval Europe, 1200-1550. NY: Cambridge University Press.
- Jacob, Marcus (2010). Long-term persistence: The free and imperial city experience in germany. SSRN working paper.

- Jedin, Hubert, Kenneth Latourette, and Jochen Martin (1987). Atlas zur Kirchengeschichte: die Christlichen Kirchen in Geschichte und Gegenwart. Munich: Herder Freiburg.
- Johanek, Peter (2000). Imperial and Free Towns in the Holy Roman Empire. Viborg: The Royal Danish Academy of Sciences and Letters: in A Comparative Study of Thirty City-State Cultures. Ed. Mogens Herman Hansen.
- Kokkonen, Andrej and Jørgen Møller (2018). Warfare and the rise and fall of representative institutions. *Working paper Muenechen*.
- Lawrence, C. H. (1994). The Friars: The Impact of the Early Mendicant Movement on Western Society. London: Longman.
- Manin, B. (1997). The Principles of Representative Government. NY: Cambridge University Press.
- McCormick, Michael, Eurydice Georganteli, and Alexander Moore ed. (2018). Darm the digital atlas of roman and medieval civilization. *Online at https://darmc.harvard.edu/maps*(Retrieved 2018 May).
- McPherson, J. , Lynn Smith-Loving, and James Cook (2001). Birds of a feather: homophily in social networks. Annual Review of Sociology 27, 415–44.
- Møller, Jørgen (2017). The birth of representative institutions: The case of the crown of aragon. Social Science History 41(2), 175–200.
- Møller, Jørgen (2018). The ecclesiastical roots of representation and consent. *Perspectives on Politics Forthcoming.*
- Newton, Kenneth (2001). Trust, social capital, civil society, and democracy. International Political Science Review 22(2), 201–214.
- NGIA (2017). World port index 2017. National Geospatial-Intelligence Agency Springfield(US).
- Nüssli, C. and M. Nüssli (2008). Georeferences historical vector data. Euratlas euratlas.com.
- Ottaway, Marina and Thomas Carothers (2000). Funding virtue: civil society and democracy promotion. Washington: Carnegie endowment for international peace.
- Pincelli, Maria Agata (2013). Verona: a model case in the study of relationships between members of religious orders and the government of the city. in Churchmen and Urban Government in Late

Medieval Italy, 1200-1450. Cambridge: Cambridge University Press, ed. Frances Andrews and Maria Agata Pincelli.

Pitkin, H. (1967). The Concept of Representation. Berkeley: University of Calif. Press.

- Pocock, J.G.A. (1975). The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition. NJ: Princeton University Press.
- Pollard, A. F. (1914). Review of: The dominican order and convocation. The English Historical Review 29(113), 146–148.
- Post, Gaines (1964). Studies in Medieval Legal Thought: Public Law and the State 1100-1322. NJ: Princeton University Press.
- Powell, James M. (2008). Mendicants, the communes, and the law. Church History 77(3), 557–573.
- Röhrkasten, Jens (2006). Secular uses of te mendicant priories of medieval London. Leuven: LeuvenUniversity Press: in The use and abuse of sacrad places in late medieval towns. Ed. Paul Trio.
- Rosenbaum, Paul (1984). The consequences of adjustment for a concomitant variable that has been affected by treatment. Journal of the Royal Statistical Society 147(5), 656–666.
- Sabetti, Filippo (2004). Local roots of constitutionalism. Perspectives on Politics 33(2), 70–78.
- Showalter, Dennis E. (1973). The business of salvation: Authority and representation in the thirteenth century dominican order. 58(4), 556–574.
- Skinner, Q. (2002). Renaissance Virtues Vol. II. UK: Cambridge University Press.
- Southern, R. W. (1970). Western Society and the Church in the Middle Ages. London: Penguin Books.
- Spufford, Peter (2002). Power and Profit: The Merchant in Medieval Europe. NY: Thames and Hudson.
- Stasavage, David (2010). When distance mattered: Geographic scale and the development of european representative assemblies. *American Political Science Review* 104(4), 625–643.

Stasavage, David (2011). States of Credit. NJ: Princeton University Press.

- Stasavage, David (2014). Was weber right? the role of urban autonomy in europe's rise. American Political Science Review 108(2), 337–354.
- Stasavage, David (2016). Representation and consent: Why they arose in europe and not elsewhere. Annual Review of Political Science 19, 145–162.
- Tabacco, Giovanni (1989). The Struggle for Power in Medieval Italy. Cambridge: Cambridge University Press.
- Thompson, Faith (1953). A Short History of Parliament, 1292-1642. Minneapolis: University of Minnesota Press.
- Tierney, Brian (1995). Freedom and the Medieval Church. Stanford: Stanford University Press: in The Origins of Modern Freedom in the West. Ed. Richard W. Davis.
- Tunmore, Harry P. (1941). The dominican order and parliament: An unsolved problem in the history of representation. The Catholic Historical Review 26(4), 479–489.
- van Zanden, Jan Luiten , Eltjo Buringh, and Maarten Bosker (2012). The rise and decline of european parliaments, 1188-1789. *Economic History Review* 65(3), 835–61.
- Verbrugge, Lois (1977). The structure of adult friendship choices. Social Forces 62, 78–83.
- Wahl, Fabian (2016). Participative political institutions in pre-modern europe: Introducing a new database. *Historical Methods* 49(2), 67–79.
- Wahl, Fabian (2018). Political participation and economic development. evidence from the rise of participative institutions in the late medieval german lands. European Review of Economic History Forthcoming.
- Wejnert, Barbara (2005). Diffusion, development, and democracy, 1800-1999. American Sociological Review 70(1), 53–81.
- Weyland, Kurt (2010). The diffusion of regime contention in european democratization 1830-1940. Comparative Political Studies 43(8/9), 1148–1176.
- Woodberry, Robert (2011). The missionary roots of liberal democracy. American Political Science Review 106(2), 244–274.

Zaldivar, A. M. (2012). Patricians' embrace of the dominican convent of st. cathrine in thirteenthcentury barcelona. *Medieval Encounters* 18(2/3), 174–206.

Appendix



Figure 3: Cities in my sample

Note: The grey area denotes the approximate territory of the Holy Roman Empire in 1500 AD (Nüssli and Nüssli 2008). Black dots represent cities covered by the (Wahl 2016) dataset.

	(1)	(2)	(3)
Dominican	1.617^{***}	1.451**	1.578**
	(0.251)	(0.453)	(0.491)
Century and City FE	No	Yes	Yes
Time-variant controls	No	No	Yes
Observations	1642	898	898

Table 4: Logit: Difference-in-Difference

Estimated using conditional logit. Standard errors clustered by city in parentheses * p<0.05, ** p<0.01, *** p<0.001

Placebo Tests

Table 5: Placebo test: The impact of dominicans before they appeared

	(1)	(2)	(3)	(4)	(5)	(6)
$Dominican_{t-100}$	0.205	0.0676	0.0629	0.1000	0.0965	0.111
	$(0.0668)^{**}$	(0.0662)	(0.0655)	(0.0728)	(0.0721)	(0.0734)
	$[0.0675]^{**}$	[0.0613]	[0.0588]	[0.0728]	[0.0721]	[0.0607]
City and Century FE	No	Yes	Yes	Yes	Yes	Yes
Time variant controls	No	No	Yes	Yes	Yes	Yes
Controls \times Century FE	No	No	No	Yes	Yes	Yes
Modern country \times Century FE	No	No	No	No	Yes	No
Province in 1200 \times Century FE	No	No	No	No	No	Yes
Observations	1317	1317	1317	1317	1317	1317

Estimated using OLS. 325 cities. Standard errors clustered by city in parentheses. Conley standard errors in brackets. * p < 0.05, ** p < 0.01, *** p < 0.001

Alternative dataset

A						
	(1)	(2)	(3)	(4)	(5)	(6)
Dominican (δ)	0.252	0.128	0.117	0.106	0.109	0.0844
	$(0.0371)^{***}$	$(0.0399)^{**}$	$(0.0391)^{**}$	$(0.0385)^{**}$	$(0.0377)^{**}$	$(0.0379)^{*}$
	$[0.0352]^{***}$	$[0.0391]^{**}$	[0.0340]**	[0.0319]**	$[0.0313]^{**}$	$[0.030]^{**}$
City and Century FE	No	Yes	Yes	Yes	Yes	Yes
Time variant controls	No	No	Yes	Yes	Yes	Yes
Controls \times Century FE	No	No	No	Yes	Yes	Yes
Modern country \times Time	No	No	No	No	Yes	No
Province in 1200 \times Time	No	No	No	No	No	Yes
Observations	5330	5330	4536	4536	4536	4536

Table 6: Dominican houses and communal government using (Bosker et al. 2013b)

Estimated using OLS. 695 cities. Standard errors clustered by city in parentheses. Conley standard errors in brackets. * p < 0.05, ** p < 0.01, *** p < 0.001

Table 7: Excluding cities in the HRE: Dominican houses and communal government using (Boskeret al. 2013b)

	(1)	(2)	(3)	(4)	(5)	(6)
Dominican (δ)	0.206	0.130	0.124	0.136	0.136	0.110
	$(0.0397)^{***}$	$(0.0432)^{**}$	$(0.0426)^{**}$	$(0.0428)^{**}$	$(0.0420)^{**}$	$(0.0420)^{**}$
	$[0.0377]^{***}$	[0.0366]**	$[0.0356]^{***}$	[0.0319]**	$[0.0351]^{***}$	$[0.033]^{**}$
City and Century FE	No	Yes	Yes	Yes	Yes	Yes
Time variant controls	No	No	Yes	Yes	Yes	Yes
Controls \times Century FE	No	No	No	Yes	Yes	Yes
Modern country \times Time	No	No	No	No	Yes	No
Province in 1200 \times Time	No	No	No	No	No	Yes
Observations	3997	3997	3384	3384	3384	3384

Estimated using OLS. 513 cities. Standard errors clustered by city in parentheses. Conley standard errors in brackets. * p < 0.05, ** p < 0.01, *** p < 0.001