January 2026

iFLAME WORKING PAPER SERIES

2026-iFLAME-03

Freehold Land, Resistance To Authoritarianism and Support for Democracy

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2026-iFlame working paper series - 03

Freehold Land, Resistance To Authoritarianism and Support for Democracy

Adrien Montalbo* †

Abstract

In this article, I provide an analysis covering 300 years of French political history and study the long-term influence of freehold land on resistance to authoritarianism and support for democracy. To do so, I use a new tool based on the toponymy of French municipalities (or places within the boundaries of municipalities). Thanks to this indicator, I am able to identify areas where freehold land was more common from the Middles Ages to the nineteenth century. I then examine the impact of freehold land on resistance to feudalism and the implementation of the Absolute Monarchy in France. By using a new dataset covering 200 years of rebellions (1600-1792), I find that municipalities with a higher prevalence of freehold land more strongly resisted the establishment of authoritarianism. Furthermore, I also find a higher support for democracy during the nineteenth-century elections in areas with more freehold land. This form of land ownership, rooted in Roman law, was therefore a significant determinant of the resistance to authoritarianism in France, and later contributed to the democratisation of the country. This long term effect is partly due to the inertia in the distribution of land ownership, and partly to the cultural transmission of democratic values over time and across generations.

JEL codes: D72 ; N43; N53 ; Q15
Keywords: freehold land; autocracy ; democratisation ; France

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†I are grateful to Jean-Marie Baland, Sheilagh Ogilvie, Jean-Philippe Platteau and Magnus Bergli Rasmussen for valuable comment. I am also grateful to participants at the 15th European Historical Economics Society Conference, 15th Swedish Economic History Meeting, 5th Annual Meeting of the Scandinavian Society for Economic and Social History, 1st Associazione Italiana per la Ricerca in Storia Economica Conference and at the seminars in the University of Namur.

"A bridge between Roman property and ours, it (freehold land) also evokes the memory of the greatest benefit ever bestowed upon humanity, freedom."
— Robert Boutruche, *L'Alleu en Bordelais et en Bazadais du XIe au XVIIIe siècle*

1 Introduction

The world has undergone three major waves of democracy. The first, a prolonged wave, began in the 1820s and primarily involved the extension of suffrage to a substantial segment of the male population in the Western world. This wave lasted nearly a century until and resulted in the creation of around 29 democracies. After the rise of autocracy and dictatorship during the 1920s and 1930s, the Allied victory in World War II sparked a second wave of democratisation, peaking in 1962 with 36 democratic nations. This was followed by a second reverse wave from 1960 to 1975, reducing the number of democracies to 30. A third wave began in the mid-1970s in southern Europe, followed by Latin America and Asia (Huntington, 1991). The collapse of the Soviet bloc and the post-communist democratic transitions of the late 1980s and early 1990s are also often included in the third wave.

However, from the mid-1990s, a third wave of autocratisation[1] is unfolding (Lührmann and Lindberg, 2019). According to the V-Dem Institute, even if the world is almost evenly divided between 91 democracies and 88 autocracies, 71% of its population live in autocracies, against 50% in 2003[2]. In 2023, the average level of democracy experienced by individuals worldwide has declined to levels seen in 1985; based on country averages, it has reverted to 1998 levels. 42 countries, home to 2.8 billion people or 35% of the world's population, are currently in ongoing episodes of autocratisation, and, since 2009, the proportion of the world's population residing in autocratising countries has surpassed the proportion living in democratising ones[3]. This phenomenon is particularly preoccupying in Eastern Europe and South and Central Asia, where democratic erosion most often manifests as attacks on freedom of speech, press, and association, the degradation of free and fair elections, or the weakening of the rule of law (Nord et al., 2024).

Due to this recent and significant democratic backsliding, understanding the factors that

[1]This process, also known as "democratic backsliding," is the direct opposite of democratisation. The broader term "autocratisation" encompasses both abrupt collapses of democracy and gradual declines in democratic characteristics within and outside of democratic regimes, leading to less democratic or more autocratic conditions. Pre-Third wave autocratisations were mostly caused by military coups, foreign invasions or self-coups, while the current autocratisation process is rather linked to a progressive undermining of democratic norms and decline of democratic institutions (Lührmann and Lindberg, 2019).

[2]Among these 71%, 44% reside in electoral autocracies, which include countries such as India, Pakistan, Bangladesh, Russia, the Philippines, and Turkey. Closed autocracies, defined by the absence of multiparty elections for the executive and of fundamental democratic components such as freedom of expression, freedom of association, and free and fair elections, include China, Iran, Myanmar, and Vietnam. This regime type accounts for 27% of the world's population

[3]The share of the world's population living in autocratising countries was of only 7% in 2003. India accounts for nearly half of today's population residing in countries undergoing autocratisation. Among the 42 autocratising countries, 28 were democracies at the start of the process, and 19 are countries where democratisation failed and turned into autocratisation.

drive democratisation and democratic consolidation has become a leading research question in political economics and political science. This paper aims at contributing to this literature by adopting a long run and global perspective on French political history. The analysis performed covers 300 years and aims at explaining the stable geographical distribution of political resistance to authoritarianism in France between the beginning of the 17th century and the end of the 19th century[4].

To do so, I use several measures of resistance to authoritarianism and democratisation at the municipality level. First, I rely on the location of rebellions against the authority of the state and against feudalism during the Absolute Monarchy in France, that is from the beginning of the 17th century to the Revolution. These variables indicate the tendency of local communities to resist the judicial and military power of the king and his representatives, as well as their efforts to maintain autonomy from the economic control of feudal lords. Second, to gauge the commitment of municipalities to defend democracy in the 19th century, I analyse the electoral outcomes of the Second and Third Republics and the support for Republican candidates. The share of votes received by Republican parties in these elections serves as a reliable proxy for support for democratic consolidation in 19th-century France (Montalbo, 2023). Additionally, I consider the birthplaces of individuals prosecuted for resisting Louis-Napoléon Bonaparte's 1851 coup d'état, which ended the Second Republic and led to the establishment of the Second Empire. This information helps measure the willingness of local communities to fight for democracy.

All these variables are strongly correlated, indicating that municipalities which resisted authoritarianism during the Ancien Régime in France were much more likely to support democracy in the 19th century. In this paper, I demonstrate that the structure of land ownership significantly contributes to this association, with freehold land being a powerful driver of long-term democratisation in France.

Information on the concentration of freehold land is unavailable before the 19th century and only exists at the county level for that period. To address this issue, I use an innovative toponymic method to identify the location of freehold land during the Ancien Régime in France. When the concentration of this type of land ownership was significant in a locality, residents were more likely to name a place within the parish (or sometimes the parish itself) in reference to freehold land. I rely on a comprehensive list of words commonly used to denote freehold land in toponymy. By combining this information with two toponymic datasets, I determine which communities were characterised by the presence of freehold land before the Revolution. I provide evidence that the toponymic variables effectively capture the presence of freehold land by demonstrating their strong correlation with 19th-century landholding inequalities.

Next, I examine the long-term impact of freehold land on resistance to authoritarianism and democratisation. To approach causality, I employ an instrumental variable (IV) estimation

[4]Authoritarianism is a concept used to define any political system characterised by the presence of a strong central authority, the rejection of democracy, reductions in the rule of law and separation of powers. Authoritarianism is often considered as one of the three major types of political systems, along with democracy and totalitarianism (Linz, 2000). In this paper I will therefore use the concept of authoritarianism to describe the French Absolute Monarchy and any non-democratic regime which existed in nineteenth-century France.

strategy, using the distance of municipalities to towns that were granted the Ius Italicum during the Roman Empire. This legal status, bestowed on certain non-Italian cities, provided them with privileges similar to those of cities within Italy, offering significant advantages in land ownership. Essentially, these towns were the only places outside Italy where individuals could obtain complete legal rights over land. My analysis shows that the *Ius Italicum* had a lasting impact on the prevalence of freehold land in France. This historical link demonstrates how ancient legal frameworks influenced land ownership patterns, which in turn shaped political resistance and support for democracy centuries later.

The estimations show a positive impact of freehold land on the resistance to authoritarianism and the democratisation of France. Indeed, an increase of one percent in the distance to municipalities with freehold land was associated with a fall of the probability to rebel against authoritarianism or feudalism comprised between 1 and 15 percentage points. The same is true regarding the support for democracy during the nineteenth century, which was higher in or closer to municipalities with freehold land before the Revolution. The results are significant for both the Second and Third Republics. A municipality located farther away from a freehold land centre was also less likely to be the birthplace of people prosecuted after the 1851, which denotes a lower tendency to fight for democracy. These findings are further corroborated by a case study of the districts of Bordeaux and Bazas in southwestern France. For these areas, a uniquely detailed survey of land properties provides precise information on the location of freehold land in the late Middle Ages. Using this very precise information also shows that freehold land was significantly and positively associated with resistance to authoritarianism and democratisation.

Finally, I investigate the transmission channels between freehold land and the political outcomes studied. I demonstrate that the observed effect is partly due to the persistence of landholding inequalities over time. The measure of freehold land from the Ancien Régime correlates with the 19th-century distribution of land. In these areas, the higher social control exerted by large landowners or feudal lords diminished the likelihood of rebellion against authoritarianism and weakened France's transition to democracy. However, data on the professions of those prosecuted after the 1851 coup reveals that most individuals who rebelled to defend democracy were not from the agricultural sector. This, along with the fact that political clubs during the Revolution were more common in areas with significant freehold land, suggests that the influence of freehold land extended to broader segments of local communities. A stronger tradition of political debate and discussion in these areas facilitated the cultural transmission of democratic values and an independent spirit over time and across generations. This broader cultural transmission helps explain the enduring impact of freehold land on political outcomes.

This paper contributes to the existing literature in several ways. First, it enriches our knowledge of the determinants of democratisation and democratic consolidation. The literature in this field has extensively focused on the modernisation hypothesis, which posits a positive effect of economic growth on democratisation, with mixed results (Lipset, 1959; Huntington, 1991;

Barro, 1999; Acemoglu et al., 2008, 2009). Transitory negative income shocks have more consistently been showed to lead to democratic change, as output contractions trigger anti-government resistance (Berger and Spoerer, 2001; Burke and Leigh, 2010; Brückner and Ciccone, 2011). In the same spirit, the threat or occurrence of revolts caused by rising economic inequalities is usually associated with democratisation (Acemolgu and Robinson, 2000; Conley and Temimi, 2001; Aidt and Franck, 2015, 2019), even though it might ultimately harm democratic consolidation as more inequalities lead to stronger distributional conflicts over time (Przeworski and Limongi, 1997; Houle, 2009; Krieckhaus et al., 2013). Closer to this paper, a strand of the literature has shown that landholding inequalities are detrimental to both democratisation and the consolidation of democracy (Gerschenkron, 1989; Boix and Stokes, 2003; Ziblatt, 2008; Ansell and Samuels, 2010; Montalbo, 2023; Emmenegger et al., 2024). Most of this scientific production either considers long-term trends at the country level or the immediate effect of shocks on revolts and democratisation. I add to this literature by being able to cover 300 years of political history at arguably the most granular level after the individual one. This enables me to show that the structure of land property significantly influenced resistance to authoritarianism, promoted democratisation and increased people's inclination to vote in favour or fight for its consolidation. Consequently, freehold land emerges as a key factor in understanding the long-term propensity of people and localities to support democratisation, which ultimately favoured democracy at the country level.

This paper therefore also contributes to the literature on the accumulation of democratic capital over time, and the effect of local support for democracy on this accumulation. This literature has put forward that pre-industrial local-level democracy, for example the tradition of selecting the local leader through consensus, rather than methods like hereditary appointment, is linked to more democratic contemporaneous national institutions (Giuliano and Nunn, 2013). The emergence of self-governed cities and local parliaments in the Middles Ages also contributed to increase trust, civic engagement and support for democratisation in the long run (Guiso et al., 2016; Angelucci et al., 2022). More generally, past experiences with democracy facilitated the development of democratic capital over time (Persson and Tabellini, 2009). I complement this literature by showing that this accumulation took place at the very disaggregated level of municipalities. Indeed, the significant and enduring influence of freehold land is evidenced to have partially operated through the cultural transmission of democratic values over time to large segments of the local communities[5]. This transmission was facilitated by collective resistance to authoritarianism, democratic sociability, and political debate, as demonstrated by the existence of political societies within municipalities with freehold land. Thus, the cultural transmission of democratic values at the very local level is essential for understanding the long-term support for democracy.

By putting forward an association between the structure of land ownership, cultural traits

[5]Regarding the transmission channel based on the inertia in the distribution of land ownership, this paper relies on the existing literature which has clearly showed that the social control of large landowners had a negative impact on democracy (Ziblatt, 2008; Boix and Stokes, 2003; Montalbo, 2023; Emmenegger et al., 2024).

and their transmission across generations, this paper also speaks to the literature on culture formation and persistence. This literature has insisted on the importance of determinants linked to the institutional and economic context. Medieval Italian cities with self-government, the Habsburg Empire, or the historical intensity of interethnic exchange in India contributed for example to long-term increases in trust (Jha, 2013; Guiso et al., 2016; Becker et al., 2016), contrary to slave trade (Nunn and Wantchekon, 2011). The frontier experience increased individualism in the USA (Bazzi et al., 2020), while violence against Jews in the 1920s and 1930s has been shown to be closely related to plague-era pogroms (Voigtländer and Voth, 2012). Closer to my finding on freehold land, agricultural organisation also influenced cultural traits linked to gender roles and fertility (Alesina et al., 2011, 2013)[6].

The rest of the article is organised as follows. Section 2 presents some historical facts about the political evolution of France, its democratisation, and the structure of land ownership until the Revolution. Section 3 introduces the data used and Section 4 the empirical strategy. Section 5 presents the impact of freehold land on the resistance to the Absolute Monarchy and Section 6 its impact on the democratisation of France. Section 7 explores the transmission channels and Section 8 concludes.

2 Historical Background from the Fall of the Western Roman Empire to the End of the Nineteenth Century

2.1 The Political Evolution of France

2.1.1 The Establishment of the Kingdom of France, the Rise of Feudalism and of the Absolute Monarchy

The political evolution of France begins with the fall of the Western Roman Empire in AD 476. The vacuum left by the collapse of Roman authority led to the emergence of various Germanic kingdoms in the region. The most significant of them was the Frankish kingdom, mainly composed of the Salian Franks from the Lower Rhine region who played an instrumental role in the constitution of the kingdom. The Franks, under the Merovingian dynasty, gradually unified the fragmented territories of Gaul. Clovis I, the first significant Merovingian king, consolidated his power through military conquests and strategic marriages, converting to Christianity around AD 496. This conversion, backed by the support of the Roman Catholic Church, played a crucial role in legitimising his rule and integrating the diverse populations of his kingdom (Musset, 1994).

The Merovingian kings eventually became figureheads as real power shifted to the mayors of the palace, culminating in the rise of the Carolingian dynasty. In 751, Pepin the Short deposed

[6]This literature has also shown that transmitted cultural characteristics, as ethnic fragmentation, trust or religion rules can have long-lasting effects on economic performance (Alesina and La Ferrara, 2005; Algan and Cahuc, 2010; Grosjean, 2011; Spolaore and Wacziarg, 2013).

the last Merovingian king, establishing the Carolingian dynasty with the blessing of the Pope. His son, Charlemagne, expanded the Frankish Kingdom into an empire that covered much of Western and Central Europe. In 800, Charlemagne was crowned Emperor of the Romans by Pope Leo III, symbolising the fusion of Roman, Christian, and Germanic elements. The Carolingian Empire laid the foundations for the future political structure of France and Europe.

However, the empire did not last long. After Charlemagne's death, the Treaty of Verdun in 843 divided the empire among his grandsons, leading to the fragmentation of his realm. This division set the stage for the emergence of distinct political entities, with West Francia eventually evolving into the kingdom of France[7].

The late 9th and 10th centuries saw further fragmentation and decentralisation as the Carolingian kings lost power to local lords. The Capetian dynasty, starting with Hugh Capet in 987, began the slow process of consolidating power. The Capetians ruled as kings of a relatively small territory around Paris, but over the centuries, they progressively expanded their influence over larger portions of what corresponds to France today. The feudal system defined this period, with power highly decentralised among numerous lords who held sway over their own territories. The king's authority was often nominal, with real power exercised by local nobility. Despite this, the Capetians gradually strengthened their control, laying the groundwork for a more unified French state.

The 14th and 15th centuries were dominated by the Hundred Years' War (1337-1453) between France and England. This protracted conflict had profound implications for the political evolution of France. Initially, the English scored significant victories, but the French, under leaders like Joan of Arc, eventually turned the tide. The war fostered a sense of national identity and helped to centralise royal authority. By the end of the conflict, the Valois dynasty, a branch of the Capetians, had secured the French throne and began rebuilding and strengthening the kingdom.

The late 15th and 16th centuries saw the French monarchy continue to consolidate power, with kings like Louis XI (1461-1483)[8] and Francis I (1515-1547) playing pivotal roles. The Bourbon dynasty, beginning with Henry IV (1589-1610), further centralised power and laid the foundations for absolute monarchy. This process culminated under the reigns of Louis XIII (1610-1643) and Louis XIV (1661-1715). The strengthening of the monarchy and the progressive move towards the establishment of the French Absolute Monarchy involved several key measures that centralised power in the hands of the king and reduced the influence of other political entities, such as the nobility, the church, and regional parliaments (Barbiche, 1999). The centralisation of power was for example increased by the establishment of intendants during the seventeenth century. These were royal officials who were sent to the provinces to enforce royal orders, oversee administration, and diminish the power of local nobility. Intendants were loyal to the king and acted as his direct representatives. The reduction of noble power also worked

[7]The expansion of the Frankish Kingdom from the start of the reign of Clovis I in 481 to the Treaty of Verdun in 843 is displayed in Figure B1.

[8]The years between parenthesis specify the periods of reign.

through establishing a standing army that was loyal to the king rather than to individual nobles. The control over the Church also increase with the implementation of the Gallicanism doctrine. This policy asserted the authority of the king over the Catholic Church in France and emphasised its independence from papal control. The king appointed bishops and controlled church revenues, further centralising power[9].

The formation of the French Kingdom, the establishment of feudalism and the consolidation of the Absolute Monarchy were accompanied by movements of resistance and revolts. Even if the medieval documentation doesn't report all the rebellions that took place in the Kingdom of France, it is generally admitted that the number of revolts increased from the mid-thirteenth century to the end of the fourteenth. These rebellions were often driven by dissatisfaction with royal authority, economic hardship, and social injustice. The process culminated with the Jacquerie of 1358 in the region around Paris, set against a backdrop of noble unpopularity following the 1356 defeat at Poitiers. The revolt was eventually brutally suppressed by the nobility, but it highlighted the severe tensions between the peasantry and the ruling class. The Paris uprising, led by the merchant Étienne Marcel, was part of a broader movement for political reform. The rebels sought to reduce the power of the monarchy and increase the influence of the Estates General. The revolt ended with the assassination of Marcel and the reassertion of royal authority. The fifteenth and sixteenth centuries were also marked by several revolts against the expanding political and fiscal authority of the king. The two most significant were the Praguerie of 1440 and the Revolt of the Pitauds (1541-1549), symbolising the resistance of feudal lords against the king's power and the opposition of provinces to his fiscal control, respectively[10].

The ministry of Richelieu and the reign of Louis XIII ended in a wave of peasant revolts, as their power was marked by the greatest fiscal offensive in the history of France. Among all of them, the Revolt of the va-nu-pieds which took place in Normandy in 1639, and the various croquant rebellions which took place in Limousin, Quercy, and Perigord (1624, 1636-1637, 1642-1643) were the most prominent, both primarily motivated by fiscal grievances. The remainder of the century saw a relative lull in such unrest, preceding the rising discontent of the eighteenth century (Bercé, 2013)[11]

The reliable information on rebellions during this period shows that the number of rebellions per year increased from around 20 at the end of the seventeenth century, to 40 until th middle of the eighteenth century, and to more than 100 from 1765 to 1789. 39% of them were tax riots, 18% linked to subsistence problems, 14% were directed against the authority of the state and 5%

[9]This centralisation was also favoured by economic actions. Jean-Baptiste Colbert, Louis XIV's finance minister, implemented mercantilist policies to strengthen the economy and increase royal revenues. Colbert promoted industry, established monopolies, and imposed tariffs on foreign goods to protect French manufacturers. A strong economy provided the financial basis for maintaining the king's absolute power.

[10]The Praguerie was a rebellion by French nobles against King Charles VII. The nobles were dissatisfied with the centralisation of royal power and the king's efforts to strengthen his authority. The rebellion was quickly crushed, and the leaders were pardoned but lost much of their influence. The Revolt of the Pitauds was sparked by the 1541 decree of Châtellerault, which extended the salt tax to the Angoumois and Saintonge provinces.

[11]With the notable exceptions of the Roure revolt in 1670 and the Revolt of the papier timbré in 1675.

against feudal institutions (Nicolas, 2014). The latter half of the eighteenth century was marked by a combination of political and economic discontent, exemplified by the Flour War of 1775. This series of riots and protests erupted due to high bread prices and grain shortages, spurred by economic policies that liberalised the grain trade and led to price increases. The government's response involved military force, but the unrest underscored widespread dissatisfaction with economic conditions. This revolt is widely regarded as a precursor to the French Revolution.

The French Revolution, beginning in 1789, was a watershed moment in French political history. It dismantled the Ancien Régime, abolished feudal privileges, and led to the declaration of the Rights of Man and of the Citizen. The revolution went through various phases, from the moderate reforms of the National Assembly to the radical phase of the Reign of Terror under the Jacobins. The revolution profoundly transformed French society, politics, and institutions. It most notably abolished the monarchy in France on September 21, 1792, and established the First Republic which would last until 1804.

2.1.2 From the Revolution to the Consolidation of the Third the Republic: the Democratisation of France

The rise of Napoleon Bonaparte marked the end of the revolutionary period. Napoleon, a military general, seized power in 1799 and established the Consulate, eventually crowning himself Emperor in 1804. His rule consolidated many of the revolution's gains, such as legal equality and the Napoleonic Code, while also centralising authority in his own hands. From the fall of Napoleon I in 1815 to the establishment of the Third Republic in 1870, France experienced a series of political regimes.

The Bourbon Restoration, spanning from 1815 to 1830, witnessed the accession of two brothers of the executed Louis XVI to the throne. Louis XVIII ruled from 1815 until 1824, followed by Charles X, who was ultimately deposed in the July Revolution of 1830[12]. The fall of Charles X resulted in the displacement of the senior branch of the Bourbon family, with his successor, King Louis-Philippe I, belonging to the cadet Orléans branch. This shift engendered a rivalry between Legitimists, who supported the senior Bourbon line, and *Orléanists*, who backed the cadet branch. Alongside the Bonapartists, adherents of the Bonaparte family, these factions constituted the three principal right-wing groups which opposed democracy in nineteenth-century France.

Louis-Philippe I was overthrown in February 1848 and the Second Republic was then proclaimed on the 24th of February 1848. [13]. The new government swiftly instituted universal male

[12]This revolution was instigated by Charles X's attempts to reinstate the institutions of the Ancien Régime, whereas the majority of Monarchists favoured more liberal policies.

[13]This followed following a series of political meetings known as the *Campagne des banquets* (banquet campaign), which occurred in various French towns from July 1847 to February 1848. 70 banquets were organised, attracting a total of 17,000 attendees. The left-wing opposition utilised these banquets to advocate for electoral law reform and broader enfranchisement. Initially, its goal was to amend the existing monarchy, not to abolish it. However, the republican opposition seized this opportunity to promote their ideas, organise, and increase their popularity. The prohibition of the final banquet, scheduled for February 22 in Paris, sparked the three-day February Revolution, which ultimately forced Louis-Philippe to abdicate.

suffrage and organised general elections in April. The newly elected National Constituent Assembly was tasked with drafting the Constitution of the Republic. Three main political parties competed in this process: the conservative *Parti de l'Ordre*, composed of Legitimists and *Orléanists*, the moderate Republicans, and the *Montagne* or *Démocrates-Socialistes* (Democrats-Socialists), representing the left-wing faction of the Republicans. In the general election, the moderate Republicans secured approximately 68% of the votes, the Conservatives 23%, and the *Démocrates-Socialistes* 9%.

In December, the first presidential election in France resulted in the victory of Louis-Napoléon Bonaparte, Napoleon I's nephew, who was supported by the right-wing Monarchists. He garnered around 74% of the votes. The general elections of May 1849 reinforced this trend, with the *Parti de l'Ordre* receiving approximately 50% of the votes, resulting in the election of 450 right-wing representatives, compared to 180 for the *Montagne* and 75 for the moderate Republicans. Following these two consecutive victories, Louis-Napoléon Bonaparte swiftly initiated plans to stage a coup against the Second Republic, which culminated on December 2, 1851. The Second Empire was officially proclaimed precisely one year later.

The rule of Napoléon III ended with the defeat of the French army in the Franco-Prussian War at the Battle of Sedan on September 1, 1870. In response to the defeat, demonstrations erupted in Paris, leading to the proclamation of the Third Republic at the city hall on September 4, 1870. Establishing the institutions of the new regime was a lengthy process, culminating in 1875 with three constitutional laws proposed by centrist representative Henri Wallon[14].

The first elections following the adoption of the Third Republic's institutions were crucial for consolidating the regime. The Monarchists had not abandoned their aspiration to restore a monarchy in France. The first elections for the lower house of Parliament took place on February 20 and March 5, 1876. The Republicans emerged victorious, electing 393 representatives compared to 208 for the Monarchists and Bonapartists. New elections were called in 1877 as Mac Mahon found it impossible to govern with a Republican majority in Parliament. Held on October 14 and 28, 1877, these elections again resulted in a Republican majority, with 323 representatives against 208 for the anti-Republicans. Mac Mahon eventually resigned in 1879 and was succeeded by Republican politician Jules Grévy.

After two consecutive failures, the discouraged Monarchists did not field candidates in 252 of the 541 constituencies in the 1881 general elections (Franck, 2016). This led to a landslide victory for the Republicans, who secured 457 seats compared to 88 for the Monarchists and Bonapartists. The Monarchists and Bonapartists remobilised and elected 201 representatives in the 1885 elections, while the Republicans won 303 seats. Initially, these results suggested the Third Republic was strongly consolidated. However, growing dissatisfaction with the regime's

[14]The length of the process was due to the threat of a monarchist restoration. Indeed, the National Assembly elected in February 1871 and tasked with defining the new regime's institutions was composed of a majority of Monarchists who opposed the establishment of a republic. Despite the election of a monarchist president, Patrice de Mac Mahon, in 1873, the Legitimists and *Orléanists* restoration efforts failed. Henri d'Artois, the Count of Chambord and grandson of Charles X, refused to accept the ceremonial role outlined in the new regime's constitution, dashing hopes for a monarchist restoration in 1873.

ability to prepare for revenge against the German Empire brought General Ernest Boulanger, the Minister of War from 1886 to 1887, into the spotlight. He attracted a portion of the Bonapartist and radical electorate and won a by-election in Paris in 1889. Despite this, Boulanger refused to stage a coup against the regime and fled to Belgium after the Republicans prosecuted him for conspiracy. His political movement failed to significantly impact the 1889 general elections, where the Republican coalition won 366 seats, compared to 168 for the anti-Republicans and 42 for Boulanger's supporters. Following this, France's democratic consolidation was complete, and the Third Republic remained unchallenged until 1940 [15].

2.2 Freehold Land and the Structure of Land Ownership Until the Revolution

The history of land ownership in France is closely intertwined with political history up until the Revolution. During this period, the two main pillars of political power were the military control of a territory and the administrative and judicial control over the land, its exploitation, and its resources. This dynamic explains the ongoing confrontations between the king and the feudal lords over control of land ownership.

Following the collapse of the Western Roman Empire, the Frankish Kingdom, under the rule of the Salian Frank Clovis I, emerged as the preeminent political entity in Gaul. Throughout the Merovingian (5th–8th centuries) and Carolingian (8th–10th centuries) periods, systems of freehold landownership persisted alongside the gradual development of feudal structures. Increasingly, land was allocated as benefices—precursors to fiefs—to loyal Frankish nobles, thereby establishing a tenure system rooted in vassalage and military obligations (Musset, 1994). Concurrently, a diverse array of landowners, both Roman and Frankish, retained outright ownership of land, free from obligations to a lord or superior authority.

The codification of the laws of the Salian Franks in the early sixth century marked the emergence of the two key terms used to describe freehold land within the Kingdom of France until the Revolution. The first term, "allod" or allodial land (*alleu* in French), and the second, "Salic land" or terra Salica (*terre salique*), both referred to forms of freehold landownership that coexisted within the legal framework. The primary distinction between these classifications was that allodial land could be inherited by both males and females, whereas Salic land was restricted to male inheritance. Additionally, freehold land could not be transferred or sold outside of the kinship group (Rivers, 1986; Drew, 1991). Further details regarding the codification of Salian laws, including the relevant legal provisions on allodial and Salic land, are provided in Subsection A.2 of the Appendix.

During the High and Late Middle Ages (11th-15th centuries), the feudal system solidified, characterised by a hierarchy of lords, vassals, and serfs. Lords owned large estates, which they

[15] The final blow to the Monarchists' hope of restoration was delivered by Pope Leo XIII in 1892 when he invited Catholics to rally the Republic in his encyclical *Au milieu des sollicitudes* (In the midst of solicitude). This *ralliement* (rallying) policy, progressively prompted French Catholics into supporting republican movements. Monarchists and Bonapartists then slowly disappeared from the political sphere.

subdivided into fiefs for vassals. Vassals provided military service and other obligations in exchange for the use of land. When this use was transmitted to commoners in exchange for the payment of an annual tax to the lord, the cens, the land was said to be a censive. Fiefs and censives were the two main forms of medieval land use and ownership, and the consolidation of the feudal system went hand in hand with a reduction in the presence of freehold land (Tricot, 1904; Bonnassie, 1990; Falque-Vert, 2004; Carrier, 2021)[16]. During the last two centuries of this period, factors such as the Black Death, economic changes, and the growth of towns began to erode the feudal system. The rise of a money-based economy allowed some peasants and townspeople to buy land outright, increasing instances of freehold ownership.

More information on the location and legislation governing freehold land can be obtained from 1454 and the proclamation of the Montils-lès-Tours order. Through this decree, King Charles VII took a significant step in the history of law by mandating the codification of the *Coutumes*. Prior to this date, the legislative system was based on written laws in the southern part of France, while these laws were most often oral in the northern part of the country. The oral laws based on traditions were called *Coutumes* (Ourliac and Gazzaniga, 2010). Historians have been able to identify and map laws pertaining to allodial property across various regions of France from the legal documents that resulted from this order. Consequently, it is possible to determine the regions where freehold land was recognised by lords during the Middle Ages, indicating areas where feudalism had less firm establishment. The term "allodial land" became significantly more prevalent from the Late Middle Ages, gradually supplanting the use of Salic land in the French legislation (d'Arbois de Jubainville, 1890; Balon, 1954). It explains why both the written and customary laws use the former expression to refer to freehold land.

Three principles outlined in the *Coutumes* and written law pertained to freehold land. The first principle was explicitly against it, stating that *Nulle terre sans seigneur* (No land without lord) should exist. The second principle, *Nul alleu sans titre* (No allodial land land without title), mandated that anyone claiming full ownership of a piece of land had to provide legal documentation to prove possession. This principle also worked against freehold land ownership, making it more challenging for commoners to acquire or retain such property. Finally, the third principle was the most favourable to freehold land and stipulated *Nul seigneur sans titre* (No lord without title), placing the burden of proving land ownership on the lords (Hesse, 1979)[17].

From the 15th century onwards, the French monarchy worked to centralise power and reduce the influence of feudal lords. This process sometimes included reclaiming land and converting it to royal domain. Numerous efforts to curtail allodial property occurred in the post-Middle Ages era, and they strongly intensified under the Absolute Monarchy (Tricot, 1904). At the états généraux of Blois in 1577, lords vehemently contested the principle of allodial property. The royal decree issued by King Louis XIII in 1629 (reinforced by a decree in 1692), known as the code Michau, similarly aimed to enforce the "No allodial land without title" principle throughout France. However, local parliaments in the eastern and southern regions, particularly

[16]Freehold land could also disappear it it was ceded to the Church.

[17]More information on the French customary laws is available in (Gay et al., 2024b).

in Languedoc and Dauphiné where freehold land were more prevalent, effectively resisted these measures (Gipoulon, 1903; Boutruche, 1947; Chianéa, 1969).

By the 18th century, the peasantry increasingly resented feudal dues and the privileges of the nobility. Freehold landownership was seen as an ideal, free from feudal burdens. Economic hardship and Enlightenment ideas fuelled discontent, leading to calls for reform and the abolition of feudal structures. The French Revolution brought radical changes to land ownership. On August 4, 1789, the National Constituent Assembly abolished feudal privileges, ending seigneurial rights and dues. The Revolution established the concept of private property as a fundamental right, enshrined in the Declaration of the Rights of Man and of the Citizen (1789). This shift laid the groundwork for modern land ownership in France, transitioning from a feudal system to one based on individual property rights.

3 Data

3.1 The Resistance to Authoritarianism Until the End of the Revolution

3.1.1 Rebellions Against State, Local Authorities and Feudalism

I rely on the Historical Social Conflict Database (HiSCoD) assembled by (Chambru and Maneuvrier-Hervieu, 2024) to construct the dependent variables on rebellions. This database gathers information on social conflicts from the Middle Ages to the late nineteenth century throughout Europe. It includes more than 20,000 events spread over 27 countries. The criteria employed to determine whether an event should be included in the database is derived from the research of (Nicolas, 2014). A social conflict is defined as any incident wherein a group of a minimum of three individuals from distinct families engages in, or poses a threat of, violence towards one or more members of another group, or towards representatives of political, religious, or economic authority. Additionally, any occurrence involving the destruction or damage to property, structures, furnishings, documents, or other symbols representing such authority is considered within this definition.

From this database, it is possible to obtain very precise information on the type of social conflict, the date and place, more rarely on the duration, the number of actors involved and if women took part in the conflict. The typology of rebellions gather 9 broad categories: tax riots; subsistence riots,; conflict with local and/or national authorities; conflict linked to feudalism; work-related conflict; religious conflict; political conflict; undetermined; and other forms of conflict.

In this paper, I focus on rebellions against the local and/or national authorities and on conflicts linked to feudalism. As rebellions are used to measure the propensity of a local community to resist feudal rules and the coercive power of monarchy, I stop the analysis in 1792. Indeed, as the French First Republic was founded on 21 September 1792, considering later

rebellions again local or national authorities would not bear the same meaning. Moreover, the abolition of feudal privileges without compensation was proclaimed by the National Convention in 1793 (Decree of July 17, 1793). Therefore, it only makes sense to consider the feudal rebellions that took place before this date.

1207 corresponds to the first occurrence of a social conflict in the HiSCoD database. However, most of the social conflicts collected took place after 1600. Only five rebellions against feudalism were reported before 1600, and 95% of the ones against state or local authorities took place after 1600. Both types of conflicts progressively increased throughout the seventeenth and eighteenth centuries, and peaked during the revolutionary period (see Figure B2 and Figure B3). This paper therefore mostly focuses on the rebellions which took place during the Absolute Monarchy in France. During this period, the HiSCoD database provides a comprehensive collection of rebellions which took place in France.

Table 1 reports the number of each type of conflict during the time period considered. Rebellions against authorities and feudalism account for respectively 15% and 8.4% (1,654 and 926 conflicts) of the 11,091 conflicts which occurred in France. These types of conflict were among the most common, alongside the tax and the subsistence riots which represented 35.5% and 20% of all rebellions. Tax revolts were mostly related smuggling alongside the borders of the *Cinq grosses fermes* (Nicolas, 2014). The majority of the "Other forms of conflict" consisted in clashes between local communities, neighbourhood or parish rivalries, and various festivals that escalated into clashes. It is important to note here that each conflict is very precisely characterised in the HiSCoD database, and is associated to only one category of rebellions. An event can't for example be reported as both fiscal and work-related.

Table 1: Typology of rebellions in France

Original typology	Typology in English	Observations	Percent
Émeute fiscale	Tax riot	3937	35.50
Émeute de subsistance	Subsistence riot	2217	19.99
Conflit contre les autorités locales et/ou nationales	Conflict with local and/or national authorities	1654	14.91
Autres formes de conflit	Other forms of conflict	1243	11.21
Conflit lié à la féodalité	Conflict linked to feudalism	926	8.35
Conflit lié au travail	Work-related conflict	484	4.36
Conflit religieux	Religious conflict	385	3.47
Indéterminé	Undetermined	196	1.77
Conflit politique	Political conflict	49	0.44
Total		11091	100.00

Source: See main text.

Notes: The table provides the typology of all rebellions as reported in the HiSCoD database that took place in France until 1792 alongside the translation of the typology in English.

In Table A1 and Table A2, I report the more detailed description of conflicts against authorities and feudalism that is provided in the database. This information is available for 393 rebellions against feudalism and 1,583 rebellions against authorities.

38% of the feudal conflicts are due to the defence of collective rights against the feudal lord. The other most common categories are the opposition to seigneurial hunting and fishing privileges, the opposition to land register updating, and hostile acts against agents of the seigneury. Together, they represent 71.5% of all the rebellions against feudalism. These rebellions therefore most often targeted the privileges of lords over natural resources and the ownership of land, as well as the legal representatives of their authority.

The rebellions against state and local authorities are scattered between more categories. Nonetheless, the vast majority of them has a very similar profile. For example, around 61% of all rebellions are linked to an opposition to a judicial seizure or eviction, revolts during the transfer of detainees, opposition to the recruitment of militias or to the enlistment of military recruits, and hostility to regular troops. Other rebellions have a different nomination, but they are almost all related to the same subcategories. These rebellions are therefore quite different from the ones against feudalism. They mostly targeted the military power of the king, alongside the judicial and coercive power of his local representatives.

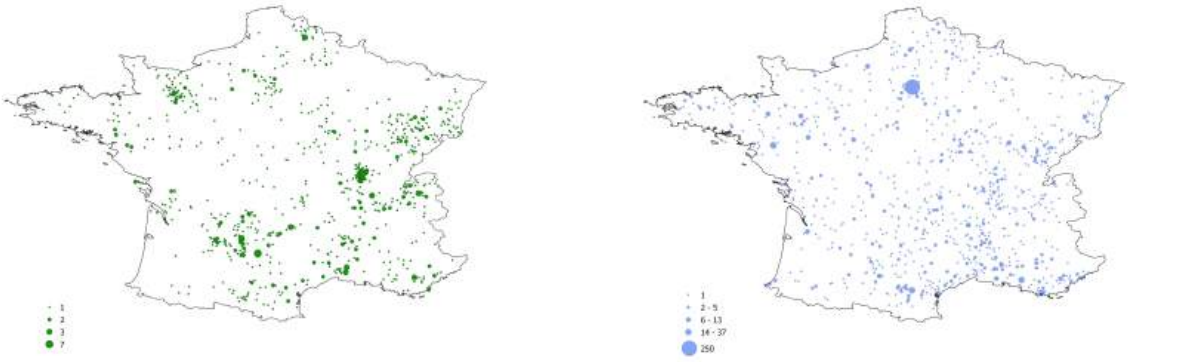
Therefore, both types of conflicts provide a very good indication of the propensity of local communities to rebel against authoritarianism. The first type is more strongly related to ownership and usage of the land, while the second type is associated with the will to resist the judicial and military authority of the state[18].

The location of conflicts against authorities and feudalism is displayed in Figure 1. As one can see, both types of rebellions are quite scattered over France, even if the eastern and south-eastern parts of the country are characterised by a relatively high concentration of rebellions. This is especially true for the ones against feudalism, which are nearly absent from the south-western, central and north-eastern parts of France.

To study the determinants of rebellions, to add covariates and to keep consistent units of observation throughout the paper, the occurrence of a rebellion is measured at the municipality level, which is the smallest administrative unit in France. These municipalities were created in 1789, their boundaries being based on the parishes of the Ancien Régime. Therefore, they provide a very good approximation of the geographical location of local communities before the nineteenth century. I consider the location of the 37,416 municipalities in 1876 from the information provided in (Gay, 2021).

There are 895 municipalities in which at least one rebellion against feudalism occurred, and 1,039 municipalities with rebellions against authorities. This corresponds to respectively 2% and 3% of the total number of municipalities. In most of the cases, rebellions took place only once or twice in a given location. 89% of the municipalities with feudalism rebellions are characterised by only one rebellion, this proportion being of 80% for the rebellions against authorities. Adding the cases of two rebellions brings these percentages to 99% and 91%.

[18]I don't include the category labelled as "Political conflict" in Table 1 within this second type. This category is mostly composed of royalist uprisings which took place in the western part of France after the adoption of the Civil Constitution of the Clergy in 1791, which put the Catholic Church under the control of the government. These rebellions increased in number between 1794 and 1800 in the Brittany and Maine provinces and formed what is called the Chouannerie.



Rebellions against feudalism | Rebellions against state and local authority

Figure 1: Rebellion against state, local authorities and feudalism in France

Source: See main text.

Notes: Each dot corresponds to the location of a rebellion. The data span the 1207-1792 period.

3.1.2 Political Clubs

The second variable used to measure the resistance to autocracy and the support for the democratic ideas is the presence of political clubs. These societies, which existed between 1789 and 1794[19], spread in the favourable context that followed the adoption of the Declaration of the Rights of Man and of the Citizen in 1789, and which allowed for the first time a public collective expression of political opinions and agendas. Present in at least 21 cities in 1789, they were 300 a year later, 1,100 by the end of 1791, and ultimately around 5,500 in 1794. Despite their diversity, all political clubs shared a common trait and objective: their members debated the current political affairs during their meetings.

The sessions were always organised in the same manner, beginning with the reading and approval of the minutes from the previous session, followed by the reading of newspapers and received correspondence, discussion and voting on motions, sending out correspondence, and finally closing the debates. As early as 1791, societies from the same department also began organising congresses, often held in the administrative centre of the department. Some of these societies were also affiliated to the Jacobin Club in Paris, which considerably influenced French politics during the Revolution.

These societies therefore represented the invention of a novel form of democratic sociability and one of the fundamental modalities of political acculturation. From the available lists of members, it also appears clearly that these clubs included representatives from all social strata, except for the clergy and the nobility. Typically, these societies were comprised of men aged between 35 and 55, encompassing a range of professions including artisans, agricultural labourers, landowners, legal experts, and rentiers (Boutier et al., 1992).

I digitise the list of political clubs from (Boutier et al., 1992). Most of the times, there was only one club in each municipality. I therefore identify 5,417 (14.5%) municipalities with a

[19] After 1794 and the fall of Robespierre, the clubs gradually disappeared. They came under increasing criticism and were accused of being too closely associated with the excesses of the Reign of Terror. The law of 6 Fructidor year III (August 23, 1795) dissolved any assembly known as a popular society.

political society, among which 784 (2.1%) are affiliated to the Jacobin Club in Paris. The map of their distribution (see Figure B4) emerges as a highly indicative sign of the French people's adherence to the Revolution. Political clubs were highly concentrated in the southeastern, central-northern and south-western parts of France. The societies were on the contrary often absent in the western regions, and the area south of Paris.

3.2 The Support for Democracy in the Nineteenth Century

In order to measure the support for democratisation and democratic consolidation in nineteenth-century France, I will use two sets of variables. The first one is based on the prosecutions that followed the 1851 French coup d'État, and the second on the electoral support for the Republicans during the Second and beginning of the Third Republic.

3.2.1 The 1851 Coup

Thanks to the coup of December 2, 1851, Louis-Napoléon Bonaparte, President of the French Second Republic for three years, retained power even though the Constitution of the Second Republic forbade him from running for re-election. The Second Empire was officially proclaimed exactly a year later and Louis-Napoléon Bonaparte then assumed the name of Napoléon III, Emperor of the French. After the coup, several uprisings broke out, especially in the south-east. They were quickly tamed by the military as one-third of the country was placed under state of siege. In 1852, thousands of people were prosecuted in connection with the December 1851 insurrection and various forms of protests against Louis Napoléon Bonaparte's coup. Joint commissions were specifically created for this purpose, while military commissions were in charge of the prosecution within the boundaries of the first military division of Paris[20].

I collected data on the 26,848 individuals prosecuted after the 1851 coup from (Farcy and Fry, 2018). This database provides rich information on the names, age, profession, place of birth and residence, and marital status of people prosecuted. I more precisely focus on the municipality of birth of people prosecuted, which is available in 92% of the cases. 5,457 municipalities (14.6%) are identified as places of birth of prosecuted people[21].

The geographical distribution of these municipalities (see Figure B5) reveals a common pattern with the one of rebellions against authorities, feudalism and the location of political clubs. Indeed, the south-eastern part of France exhibits the strongest concentration of municipalities of birth, alongside the central-eastern region and the historical Languedoc province. These

[20] Joint commissions were composed of the commander of the military division, the prefect, and the attorney general (or their substitute) in the departments where the administrative centre of a military division was located, and of the prefect, the military commander, and the public prosecutor elsewhere.

[21] The list of individuals could be partly biased as authorities might have prosecuted political rivals even if they didn't take part in the opposition to the 1851 coup (Agulhon, 2016). However, this problem was most likely limited. Indeed, the geographical distribution of the places of birth is highly correlated with the electoral opposition to Louis-Napoléon Bonaparte, and therefore to the concentration of people that were the most likely to rebel. Even if it is not perfect, this lists is a very good indicator of the concentration of people that more strongly opposed the authoritarian drift of Louis-Napoléon Bonaparte's presidential term.

areas are consistently characterised by a higher propensity to resist autocracy and promote democratic values.

3.2.2 Nineteenth-Century Elections

The second indicator of the intensity of support for democracy in nineteenth-century France is constituted by electoral outcomes. I select two sets of elections: (i) all the elections that took place during the Second Republic; (ii) the legislative elections of the early Third Republic, from 1876 to 1889. The first group is composed of the legislative elections of April 1848 and May 1849, and of the presidential election of December 1848. The second group comprises the legislatives elections of February 1876, August 1881, October 1885 and September 1889[22]. My focus lies on the elections for the lower house of Parliament, as members of the upper house were elected by officials holding local mandates, such as mayors, rather than directly by the people. I also collect turnout levels, measured as the ratio of people who voted over the number of voters enrolled, for each election.

Electoral outcomes at the municipality level are collected from (Cagé and Piketty, 2023), which provides a detail account of the number of votes in favour of each political party or coalition in the first round of each election[23]. From this account, I constructed an indicator of support for the Republicans by summing the votes in favour of all Republican political groups. Table A3 provides the list of these groups for each election considered. In broad terms, opposition to the Republicans was embodied by the right-wing and conservative *Parti de L'Ordre*, comprising Legitimists and Orléanists. During the Third Republic elections, the Republican opposition included Monarchists and Bonapartists, along with supporters of Boulanger in 1889. I don't consider elections after 1889, as the Third Republic was strongly consolidated after this date. Indeed, with the publication of the encyclical *Au milieu des sollicitudes* (In the midst of solicitude) in 1892, Leo XIII invited French Catholics to rally the Republic. This *ralliement* (rallying) policy, caused the progressive disappearance of the adversaries of the Republic from the political sphere. Only 75 Monarchist and Bonapartist representatives were for example elected in 1893, against 480 Republican ones (see Table A4).

As discussed in (Montalbo, 2023), the electoral support for Republicans is a reliable indicator of the will of people to strengthen the democracy in France. Its geographical distribution remained quite stable during the Second and Third Republics, with a generally higher concen-

[22] I don't include the October 1877 legislative election in this second set as its outcomes are not available at the municipality level. The presidential elections of the early Third Republic are not included as, from the constitutional laws of 1875, the President was elected by the members of Parliament. The 1871 legislative election is not included for two reasons. First, 43 departments were still occupied by the Prussian troops in 1871, a context which influenced the meaning of the election. What was at stake during this election was not the nature of the regime but the peace with Prussia or the continuation of the war (Gouault, 1954). It is therefore hard to draw conclusions on the support for democratisation from this election. Moreover, the electoral outcomes are available at the municipality level for only 15 departments, which is likely to introduce a selection bias in the analysis (Cagé and Piketty, 2023).

[23] (Cagé and Piketty, 2023) only provides the electoral outcomes at the municipality level for the first rounds. Regardless of this fact, there were insufficient instances of second-round elections to allow for a quantitative analysis. Additionally, political inclinations are more authentically disclosed during the initial round, as instances of "strategic" voting or abstention are less probable.

tration of Republican votes in the south-eastern and central parts of France. The north-eastern regions also progressively shifted towards the Republican side of the political spectrum after their occupation by the Prussian army between 1870 and 1873 (Salmon, 2001) (see Figure B6 and Figure B7).

3.3 Freehold Land and Toponymy

Identifying precisely the areas of France where the freehold property of land was more common during the Ancien Régime represents a challenge. From the progressive codification of the *Coutumes* which started in the mid-fifteenth century, it is possible to identify the laws governing land ownership within the historical provinces. Hesse, 1979 provides a map (reproduced in Figure B8) specifying if the customary or written law was favourable to freehold land or not. If it was, the responsibility to prove the ownership of the land was hanging on the feudal lords (*No lord without title* principle), while commoners had to provide legal documents proving their right to own the land if the customary law was not favourable to freehold land (*No allod without title* principle). It was only within the boundaries of the historical Brittany region that land could never be owned by commoners (*No land without lord*).

Based on this map, France can be divided into two distinct categories. To the south of an imaginary line extending from the Ardennes departments to the Landes, legislation tended to favour freehold land, whereas to the north of this line, the opposite was true (see Figure B9)[24]. According to this crude classification, around 56% of the municipalities were located in the region favourable to freehold land. I therefore create a first binary variable, named Freehold law, based on this difference in customary legislation. This represents a rough estimation of the prevalence of freehold land, merely indicating the relative ease with which commoners could attain land ownership. In most of the cases, I will therefore use this variable as a control.

However, it is worth noting that rebellions against authorities or feudalism, the presence of political clubs, the birthplace of prosecuted people in 1852 and the support for democracy measured from the electoral outcomes of the nineteenth century, are quite strongly correlated to the favourable legislation on land ownership[25]. Therefore, even the crudest approximation of the location of freehold land already shows that it was strongly related to resistance to authoritarianism and the support for democracy.

In this paper, I employ a innovative research strategy to overcome the lack of data on freehold land before the nineteenth century. To do so, I rely on the toponyms (place names) of municipalities or places comprised within their boundaries. Toponyms mostly refer to the

[24] I make one modification to the map provided in Hesse, 1979 by including the Provence province the region favourable to freehold land. This province maintained a legislation favourable to freehold land until 1738, which covers the main part of the period going from the seventeenth century to the Revolution.

[25] 2.8% of the municipalities within the favourable region rebelled against feudalism, against 1.8% of their counterparts. The respective figures for rebellions against authorities are 3.3% and 2.2%. The concentration of political clubs and birthplaces was higher in the favourable region (15.1% against 13.6% and 18.3% against 10% of the municipalities). The Republican share of vote was also consistently higher within this region, both during the Second and the Third Republic (38% against 33.6% and 62.2% against 47.7%).

physical geography of locations (usually the relief, rivers, forests and fields), patterns of settlements, successive occupancies, shifts in ethnicity and politics, nationalistic sentiments, human activities, and the processes of cultural diffusion (Savage, 2009). The use and evolution of toponyms reflect local communities' desire to distinguish a specific feature of a location from nearby ones. As such, they are valuable assets for understanding the current and historical characteristics of places (Cacciafoco and Cavallaro, 2023). Subsection B.2.2 of the Appendix provides more information on the field of toponymy and its application to the French case.

Using toponyms to identify the presence of freehold land relies on the hypothesis that, when the concentration of this type of land ownership was strong enough in a given locality, its inhabitants would more often tend to name a place (a parish, a hamlet, a stream, a farm, a wood, ...) in reference to freehold land. This hypothesis aligns with findings from toponymic research, which demonstrated that the structure of land ownership, its modification during feudalism, and the presence of freehold land significantly influenced place names (d'Arbois de Jubainville, 1890; Longnon, 1920; Boutruche, 1947; Dauzat, 1947; Dauzat and Rostaing, 1978; Rostaing, 1992). As freehold land was rare and could be subject to attacks from the feudal lords until the Revolution in France, it was indeed often paramount for local communities to emphasise that their possession of the land was unequivocal. This notably explains why the references to freehold land are much more common in the historical toponymy compared to references to fiefdom, which could not easily be challenged by a superior power (Balon, 1954). I will also provide evidence that this assumption holds true, as toponymic indications about land ownership exhibit a very strong correlation with landholding inequalities measured in the nineteenth century.

Using toponymy requires to first identify a reliable set of toponyms that would refer to freehold land. As specified earlier, this type of land was either called allodial land (*Alleux*) or Salic land (*Terre salique*) from the invasion of the Frankish tribes in the fifth century, even if the first denomination was more common from the Late Middles Ages. Most importantly, these legal denominations remained stable until the Revolution, which entails that they referred to freehold land during he entire period under scrutiny. I mainly rely on the lists of toponyms provided in (Balon, 1954) to identify freehold land. In this book, he provides a detailed analysis of historical toponymy in France and a list of toponyms referring to both historical denominations of freehold land. I checked and completed this list by using several toponymic dictionaries: Longnon, 1920; Nègre, 1990; Pégorier, 2006; Billy, 2011; Jespers, 2021.

The full list of toponyms is displayed in Table 2. It provides comprehensive information on the names of places related to freehold land. These words don't have a direct meaning in French, as they are derived from local dialects. For example, the words "Alluaz" and "Alluat" were used in the Savoy region to refer to a small *alleu*, but they were never used in standard French. These words cover all regions that constitute France today, which is crucial to carry the analysis as toponyms could vary strongly depending on the region and the dialect used The list also includes some Latin words as "Allodium" that were used to refer to freehold land.

Table 2: Words used to defined freehold land thanks to the toponymy of places

Target word	Words used in the toponymy analysis
Alleux (Allodial land)	A-Heu, Aaleu, Aalleu, Aillac, Aillant, Aillat, Aille, Aillerie, Aillet, Ailleteau, Ailleu, Aillianville, Ailliere, Aillière, Aillot, Ailly, Alagnon, Alais, Alas, Alaux, Ales, Alet, Aletz, Aleu, Aleuse, Alhoumont, Alieu, Allaine, Allais, Allamens, Allamont, Alland, Allard, Alle, Alleaume, Alleis, Allemagne, Allemanderie, Allemands, Allemant, Allemonie, Allemont, Allemont, Alleret, Alles, Alleu, Alleud, Alleuf, Alleuze, Alleuzet, Allez, Allezet, Allezieux, Alliame, Allichamp, Alliot, Allioteur, Allioud, Allix, Alliés, Allod, Allodia, Allodia, Allodiateur, Allodier, Allodiis, Allodiorum, Allodium, Alloeuf, Allogny, Alloi, Allomont, Allos, Allot, Allou, Allou, Allouage, Allouagne, Allouet, Allouette, Allouis, Alloux, Allox, Allozier, Alluat, Alluaz, Allue, Alluech, Allueche, Alluet, Alluires, Alluèch, Alluèche, Ally, Allès, Allées, Almany, Alo, Alod, Alod, Alodis, Alodium, Alodum, Alodus, Aloes, Alois, Alont, Alos, Alosa, Alosse, Alot, Alotis, Alotus, Alou, Alouard, Aloue, Alouette, Alouetterie, Alouxe, Aloxe, Alue, Aluef, Aluel, Alus, Aly, Arleu, Arleuf, La Lieue, Laleu, Laleuf, Lalheue, Lalleu, Lalo, Laloeuf, Lalot, Lalue, Lanluet, Zaleux
Terre salique (Salic land)	Cella, Essel, Mancellerie, Mansellerie, Massalet, Massalès, Saala, Sailh, Sailly, Sal-Bas, Sal-Granier, Sal-Haut, Sal-du-Roi, Sala, Salaberry, Salabert, Salabertie, Salade, Saladeille, Saladie, Saladon, Saladou, Salae, Salagie, Salagnac, Salagosse, Salagou, Salagre, Salagé, Salaia, Salajouie, Salamon, Salamonie, Salan, Salanave, Salanhugue, Salarin, Salarun, Salasc, Salassière, Salatum, Salavas, Salaver, Salavert, Salaves, Salavigne, Salazac, Salazar, Salazie, Salbertrand, Salbous, Salcede, Sale, Salebert, Saleboye, Salecroux, Salecrus, Salegias, Salegourde, Saleich, Saleix, Salellas, Salelle, Salemagne, Salenave, Salepech, Salepinche, Salers, Salesse, Salesson, Salet, Saleta, Salette, Salette, Saletz, Saleuil, Salever, Salevert, Saleverte, Salh, Salha, Salheux, Salibourne, Salica, Salicate, Salices, Salicurtis, Saliens, Salies, Saligny, Saligoux, Salilhes, Salinc, Salis, Salis, Salis, Salisson, Saliège, Salière, Sallage, Sallandière, Sallaut, Sallaz, Salle, Sallecroix, Sallegriffe, Salleia, Sallenelle, Salleneuve, Sallepisse, Salliacum, Sallian, Sallon, Sallèle, Salmagne, Salmanciacum, Salmon, Salmondière, Salmoneyrie, Salmonie, Salmonnie, Salmontiacum, Salo, Salon, Salon, Salos, Saloux, Sals, Salsias, Salut, Saly, Salès, Saucourt, Saulon, Seillat, Seille, Seille, Seillière, Seillon, Seillonnas, Selignac, Selignat, Selignien, Sellae, Sellerie, Seloncourt, Selongey, Sillion, Solz, Soul, Soulhz, Séas

Source: See main text.

Notes: The two lists of words report all the terms that are used in the toponymy analysis to identify the presence of freehold land. These terms either refer to the "allod" or to the "salic" word which are linked to freehold land.

After obtaining the list of toponyms, the second step requires to identify the municipalities where these toponyms were located. To do so, I rely on two dictionaries. The first one provides an historical account of toponyms in France and has been recently assembled by a group of historians (CTHS, 2020). It is based on a project initiated by the *Comité des travaux historiques et scientifiques* (Committee of Historical and Scientific Works), a research institution created by François Guizot, Minister of Public Instruction, on July 18, 1834, and which aimed at publishing toponymic dictionaries for all French departments. These dictionaries, published from 1859, cover 35 departments but have unfortunately never been completed for the remaining ones. They provide the list of all French municipalities within the department at stake, and a precise inventory of all the historical transformations of their names. The same information is also available for various places located within these municipalities, as abbeys, fields, old roads, hamlets or streams.

The information available in (CTHS, 2020) covers 41 departments, which roughly corresponds to half of the country[26]. This information derives from the 35 dictionaries published by

[26]The website of (CTHS, 2020) specifies that 42 departments are available. However, they do not provide data for the Savoie one, and the information is therefore available for 41 of them. The list of toponymic dictionary for each department is available on the website.

the *Comité des travaux historiques et scientifiques* and from 6 other independent publications. In total, 511,944 different places are reported in this historical dictionary, alongside 1,207,647 names. As this information is available for nearly 20,000 municipalities, this corresponds to around 25 places reported per municipality, and 2.4 historical names per place. Thanks to this information, I am therefore able to identify if, throughout the history of a municipality, a toponym referring to freehold land appeared. If this is the case, it means that the freehold property of land was possible within this municipality, and that some commoners managed to secure it for a sufficiently long period of time so that a geographic or human feature would be named after it.

Subsection B.2.3 in the Appendix provides more information about the sources used in the dictionaries, and Table A5 specifies the list of departments and the dates of publication. 24 dictionaries over the 41 were published during the nineteenth century, 9 from 1900 to WWII and 8 from WWII. They usually report the list toponyms and of their modifications up to the publication date. For 536,049 of them, around 44.4% of all toponyms, it is possible to know the date at which the toponym was first spotted by the archivists. It doesn't necessarily mean that the toponym was created or modified at this time, as it might have existed before being recorded for the first time. This information however provides a good indication about the year when a toponym appeared or was modified. The first toponym was recorded in year 48. Only 2.9% of the toponyms were recorded before 1100, and 80% were between 1200 and 1800. Most of the toponym creations or modifications therefore took place during the Late Middles Ages and the Ancien Régime (see Table A6).

The dataset also provides a detailed account of the various geographical and human characteristics associated with the toponyms. Among the 6,970 toponyms linked to freehold land, 336 distinct features are identified. In Table A7, I classify these toponyms into eight groups. Of these, 46% are linked to hamlets, villages, houses, or street names. Parish or municipality names related to freehold land represent 14% of the total, while 20% are connected to farms or cultivated fields. Geographical features like rivers, reliefs, or woods account for 14.8%, while castles and religious buildings represent 3.4% and 2%, respectively.

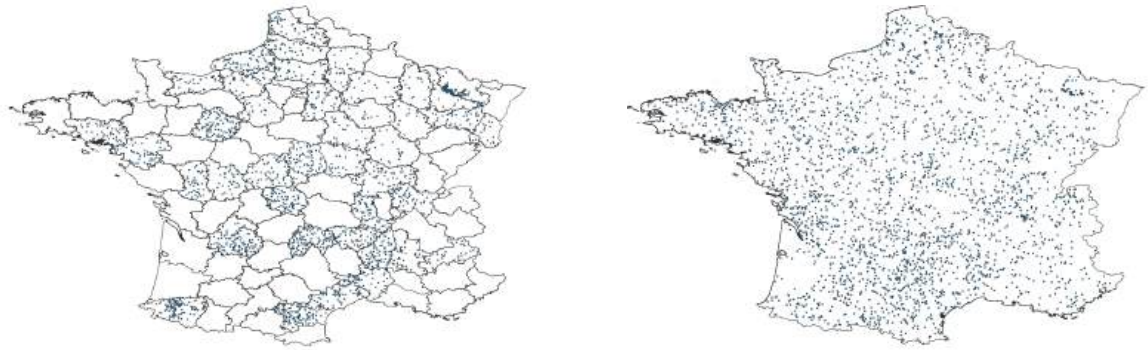
The second toponymic source gathers information on toponyms from the National Institute of Geographic and Forest Information (*Institut national de l'information géographique et forestière*), the public administrative body responsible for the production, maintenance, and dissemination of geographic information in France. It provides 1.6 millions toponyms based on municipalities' names, but also various places within the municipalities as in the historical dictionary (CDIP, 2006). However, it only provides the current names (as of 2004), and doesn't track their historical transformations. It is therefore only possible to evaluate the state of current toponymy using this database, and I mainly use it to complement the historical one and cover the entire country.

The information on freehold land provided by the current toponymy is less precise. First, it doesn't capture the historical toponyms. Second, toponyms related to freehold land until

the beginning of the nineteenth century might have changed and not be present in the current data[27]. The municipalities identified thanks to the current toponymy are therefore very likely to correspond to the places where referring to freehold land was extremely important for the local population. If not, it is unlikely that freehold land toponyms would have survived. Moreover, I will show that there is a high correspondence between the historical and the current toponymy, which strengthens the idea that the current one is a reliable indicator of the historical presence of freehold land.

The (CDIP, 2006) database also provides information on the type of geographical or human features associated with toponyms, although its classification is more general than the one from the historical database. 3,563 toponyms are found to be linked to freehold land. Among them, around two-thirds are associated with hamlets, villages, or inhabited places that are part of a given municipality. Around 7% are linked to reliefs, 6% to streams or rivers, 4% to woods and 4.6% to a municipality name. The presence of religious buildings and castles is restricted in the current toponymy, with respectively 3.6% and 1.1% of the toponyms (see Table A8).

From these two datasets, I identified the toponyms which include the keywords of Table 2. The toponyms can either corresponds perfectly to a keyword or be formed by several words including it. Around 11% of the 20,000 municipalities present in the historical database are identified as being characterised by the presence of freehold land according to their toponyms, and 8% of the 37,000 municipalities according to the list of current toponyms. The location of freehold land toponyms from both toponymy is displayed in Figure 2. The freehold land toponyms are quite homogeneously scattered over France, even in the region where customary laws were less favourable to freehold land. Subsection B.2.4 in the Appendix provides several examples of historical and current toponyms referring to freehold land. It specifies their sources, potential transformations over time and their presence on a map when possible.



Historical toponymy Current toponymy

Figure 2: Municipalities with freehold land according to the toponymy

[27]It is also possible to imagine that toponyms referring to land ownership appeared after the Revolution or even the nineteenth century. Local authorities might for example have been influenced by nearby place names and chose to rename a location within their municipality accordingly. This is however less likely to strongly bias the information.

Source: See main text.

Notes: Each dot corresponds to the location of a municipality whose historical or current toponymy refers to freehold land. Departments in white are absent from the historical toponymy data.

Comparing the two toponymy datasets is challenging. Indeed, some toponyms might have disappeared after 1800, especially if they were associated to human constructions as bridges, hamlets, abbeys, villages, tracks, ... Even the ones linked to geographical features as fields might have been engulfed by toponyms describing a wider part of the landscape. Moreover, if a municipality is associated to freehold land in the current toponymy but no the historical one, this can be due to a feature which was identified in the current dataset but not in the historical toponymy.

Still, a high coherence is expected between the two datasets. Indeed, toponyms are usually stable entities that survive population or linguistic changes without being completely replaced (Cacciafoco and Cavallaro, 2023). Orthographical modifications may have taken place, but most of them should be included in the list provided in Table 2. This is indeed what appears in the data. There is a very high correlation between the percentage of municipalities identified as linked to freehold land in the historical and current datasets. The correlation coefficient is of 0.81 and 0.78, depending on if the percentage is measure as the department or district level (see Figure B17). Areas where freehold land was more concentrated are therefore largely the same according to the historical or current toponymy[28].

The same is true when looking when evaluating the coherence between the two datasets at the municipality level. Even if there is a discrepancy in the places and toponyms identified between the two toponymies, being associated to freehold land in the historical dataset is a strong predictor of having the same status in the current one. Indeed, this increases by 25 percentage-points the probability for a municipality to be identified as linked to freehold land in the current toponymy (Table A9). Therefore, in spite of the potential toponym creations, modifications and disappearances, the current dataset appears to be a reliable indicator of freehold land toponymy.

3.4 Control Variables

I use several control variables which are likely to have influenced the resistance to autocracy and the support for democratisation in the long run. I will in particular control for the distance of municipalities to: (i) Roman roads; (ii) waterways and coastline; (iii) universities in 1600; (iv) Bishopric or Archbishopric seats in 1450; (v) Dominican monasteries established until 1500; (vi) terrain ruggedness and (vii) wheat suitability.

The map of Roman roads is retrieved from (McCormick et al., 2023) and (Talbert, 2000), while the location of Bishopric or Archbishopric seats, universities and Dominican monasteries is coming from (McCormick et al., 2023). The location of navigable rivers and coastlines is derived from the European Environment Agency and (Ryavec and Henderson, 2018). Elevation

[28]The percentage of municipalities characterised by freehold land is also almost always lower in the current toponymy compared to the historical one. This is coherent with the fact that the current database doesn't record historical toponyms or their transformations, and that some toponyms disappeared over time.

data used to compute terrain ruggedness are the same than in (Nunn and Puga, 2012). Wheat suitability is computed using the GAEZ project from (FAO, 2022), with rain-fed water supply and no CO2 fertilisation. All these variables are reported from Figure B18 to Figure B24.

All distances are computed in kilometres as straight lines from the centroid of municipalities. Figure B25 provides an example with the distance to Roman roads.

The summary statistics for all variable used are provided in Table A10.

4 Estimation Strategy

4.1 Toponymy and Nineteenth-Century Landholding Inequalities

The toponymy literature indicates that land ownership had a strong influence on place names. Additionally, historical and current toponymic variables show a strong correlation. These observations indicate that toponymy can reliably measure the presence of freehold land, with this reliability remaining strong over time. It is possible to test this prediction by using data on landholding inequalities from the nineteenth century. Indeed, these inequalities are expected to be long-lasting, at least at the department or district levels. Moreover, even if the Revolution generalised the private property of land, it didn't contribute to drastically modify the geographic distribution of land ownership.

This appears clearly when looking at the share of landless agricultural workers in 1851 or 1872 in France, and comparing this map with the customary laws on land ownership. The two are highly correlated, as the centre-southern, south-eastern and south-western parts of France where legislation was more favourable to freehold land during the Ancien Régime are also the areas where the share of landless workers was the lowest during the nineteenth century (see Figure B9 and Figure B26). On average, there were 57.8% of landless workers in 1851 in areas where customary laws were favourable to freehold land, against 74.1% for the remaining part of the country.

For both the historical and the current toponymy, the percentage of freehold land municipalities is also negatively associated with the share of landless workers. Indeed, an increase of one percentage point in the concentration of freehold land is associated with a fall between 0.5 and 0.9 percentage points in the presence of landless workers. This association remains highly significant even after controlling for several wealth and demographic variables (see Figure B27 and Table A11). These estimations bolster the reliability of using toponymy to measure landholding inequalities both in a cross-section and over time.

4.2 Distance to Freehold Land

In the estimations, I will most of the times not rely on the binary indicators of freehold land toponymy, but on the distance to municipalities identified as such. This choice is motivated by several reasons.

First, as I am using an IV strategy, relying on binary variables would lead to less precise estimates. Second, the use of the distance helps taking into account the fact only the municipalities where freehold land was the most concentrated are likely to appear in the toponymy. However, it seems sensible to consider that municipalities close to these freehold centres were also characterised by the presence of freehold land. Doing so, I am therefore less likely to over-estimate the effect of land ownership.

The distribution of the distances to freehold land centres is highly comparable across the two toponymic datasets. It varies from 0 to 48 kilometres with an average of 6.6 for the distance to the municipalities with an historical toponymy, and from 0 to 56 kilometres with an average of 7.8 for the current toponymy (see Figure B28). As expected, there is also a strong correlation at the department level between the percentage of freehold land municipalities and the distance to these municipalities. Using distance instead of binary variables is therefore unlikely introduce a bias in the estimations (see Figure B29)[29].

4.3 Estimation Model

The estimation model I use in this work is the following:

$$Freehold_m = \alpha_m + \beta_1 NearIus_m + \beta_2 Dist_m + \beta_3 Land_m + \epsilon_{m,d} \quad (1)$$

$$Political_m = \alpha_m + \beta_1 Freehold_m + \beta_2 Dist_m + \beta_3 Land_m + \epsilon_{m,d} \quad (2)$$

where (1) corresponds to the first stage equation and (2) to the second stage. *Freehold* stands for the freehold land variables used at the municipality level m, which is the unit of observation considered throughout the paper. The freehold land variables will most of the times be the log of the distance to municipalities where this type of land ownership was concentrated according to either the historical or the current toponymy. *Dist* and *Land* encompass the control variables. In the main specification, *Dist* comprises the distance to Roman roads, waterways and coastline; universities in 1600; Bishopric or Archbishopric seats en 1450; Dominican monasteries established until 1500. *Land* controls include: terrain ruggedness and wheat suitability. I also include a binary variables names *Freehold law* in the estimations, which indicates if the customary law that applied to the municipality at stake was favourable or not to freehold land. This controls for the regional context surrounding land ownership. *Political* stands for the political outcomes considered in the paper. Standard errors are clustered at the district level, the administrative subdivisions of departments called *arrondissements*. There were 380 of them in nineteenth-century France.

[29] One limitation of using distances instead of binary variables with the historical toponymy is that the dataset does not cover all departments. Therefore, a municipality could be identified as relatively far away from a freehold land centre in the data, while it was actually close to another one located within a neighbouring department which is not included in the dataset. However, this issue is unlikely to introduce a strong bias in the distance variable. Indeed, as the distance to freehold land centres is of only 7 kilometres on average, it is unlikely that covering all the departments would drastically change this measure.

In the baseline estimations, all municipalities of France as define in 1876 (plus the Alsace departments lost in 1871) are included, except the ones located in Corsica and within the five departments that constitute the historical Brittany region (Cotes-d'Armor, Finistère, Ille-et-Vilaine, Loire-Atlantique, Morbihan). I exclude Corsica from the analysis as (Hesse, 1979) doesn't provide information on its customary law and if it was favourable or not to freehold land. The historical region of Brittany is excluded because it was never conquered by the Frankish tribes. It remained independent from the Kingdom of France, first as the Kingdom of Brittany (851–939) and then as the Duchy of Brittany (939–1547), until the Duchy was united with the Crown of France in 1532. I therefore expect the presence of freehold land toponyms in this area to a less reliable indicator of this type of land ownership. Robustness checks will show that including Brittany in the estimations doesn't change the significance of the outcomes.

The choice of control variables is motivated by need to control for factors that could have influenced the resistance to autocracy and support for democratisation in the long run. The existing literature has notably highlighted the importance of pre-existing religious institutions on the establishment of the medieval communes in Europe. The rise of free-city states and self-government was for example influenced by the presence of bishop seats in Italy (Guiso et al., 2016). The establishment of representative institutions within towns of the Holy Roman Empire was favoured by the proximity of Dominican houses and their structure of internal government based on the elections of representatives (Doucette, 2021). The proximity to these seats and houses could have therefore influenced public debate and democratic life within the municipalities at it did for the rise of city councils. I therefore control for the distance to Bishopric or Archbishopric seats and Dominican monasteries. As in previous studies, I don't consider seats or houses established after 1500, as the communes movement declined in France and several part of Europe after this date (van Zanden et al., 2012). Their presence after 1500 is therefore not expected to have a strong political influence on municipalities.

I also control for terrain ruggedness in the estimations. Indeed, as shown in Figure B23 and Figure B9, a higher ruggedness is positively correlated to the customary laws favourable to freehold land. In (Montalbo, 2023), I hypothesised to explain this association that terrain ruggedness contributed to protect landowners from the expansion of feudalism and the attacks of feudal lords against free property. If the correlation is strong at the department level, ruggedness is expected to influence land ownership less strongly at the municipality level. Indeed, with an average area of 11 hectares during the nineteenth century, municipalities were most likely too small to have their property structure influenced by ruggedness[30]. Nonetheless, the strong regional correlation motivates its inclusion in the list of control variables.

Finally, I include variables that could have had an indirect effect on municipalities' political life through their impact on development. I control for trade opportunities and road density

[30]Municipalities identified as linked to freehold land are characterised by a significantly higher terrain ruggedness. However, this association is not strong enough to allow using ruggedness as an instrument as I did in (Montalbo, 2023). Doing so would indeed lead to *F-stats* with a value oscillating around 3. The association between land ownership and ruggedness is therefore more reliable and relevant at the department than at the municipality level.

by including the distance from municipalities to Roman roads as well as the distance to navigable rivers and coastline. The location of Roman roads had indeed a long-lasting influence on the road network, settlement formation and on trade. Even today's development level and interregional trade are influenced by this network (Wahl, 2017; Dalgaard et al., 2022; Flückiger et al., 2022). Moreover, these geographical variables have influenced self-governance and enfranchisement in England through their positive impact on trade (Angelucci et al., 2022). The presence of universities (but also Bishopric or Archbishopric seats), and having good access to navigable water also spurred urban development in Europe from the Middles Ages to the nineteenth century (Acemoglu et al., 2005; Bosker et al., 2013). I therefore also include the distance to these features in the estimations. I consider the presence of universities in 1600 to capture urban development and population growth until the surge of rebellions from the early seventeenth century. I also include a wheat suitability index in the estimations to control for agricultural wealth. This choice is motivated by the dominant position of wheat in French agriculture during the Middles Ages and the nineteenth century[31]. I will also include other suitability indexes as a robustness check.

To estimate the impact of freehold land and approach causality, I rely on an IV strategy[32]. In the first stage, I use $NearIus$, the distance to towns that were granted the *Ius Italicum* as an instrument for the freehold land variables $Freehold$. The concept of *Ius Italicum* (Latin for "Italian right" or "Italian law") refers to a legal status mainly granted by the Roman Empire from 27 BC to certain non-Italian cities, conferring privileges akin to those of cities within Italy itself. This status provided significant advantages, particularly in terms of taxation and land ownership.

As Rome expanded its control over the Italian peninsula from the 4th century BC, it incorporated various Latin and Italic tribes. Roman citizenship was initially granted selectively, creating a hierarchy of legal statuses among the inhabitants of Italy. This process ended with The Social War (91 BC-88 BC), a conflict between Rome and its Italian allies, who sought Roman citizenship and equal rights. The Lex Julia (90 BC) extended Roman citizenship to all free Italians. This change led to a more unified Italian identity under Roman law. Following the conquests of the Mediterranean (2nd-1st centuries BC), Rome established colonies in the provinces, populated by Roman veterans and citizens. These colonies were granted Latin

[31]For instance, wheat growing accounted for 13% of the national territory, 20% of ploughed land and 34% of the land sown with cereals during the nineteenth century. Oat occupied 21% of the land sown with cereals, rye 14% and the remaining 30% were used to cultivate maize, buckwheat, barley and meslin. Wheat was therefore the most important cereal in France at that time, either in terms of cultivation or consumption as a large part of the bread consumed was made from it (Heffer et al., 1986).

[32]The OLS estimates are indeed subject to several problems in this case. First, there could be measurement errors in the independent variables built thanks to the historical and current toponymy. Second, a third factor that I fail to control for can have influenced both the establishment or the defence of freehold land and the resistance to authoritarianism. This would lead to an omitted variable bias in the OLS estimations. Agricultural wealth could be one of these factors. Finally, I can't exclude the problem of reverse causality here. Indeed, a successful rebellion against feudal lords may have led to the creation of freehold land properties within a parish, which would have then influence the toponymy.

Rights (*Ius Latii*) initially, which provided certain legal privileges[33]. The concept of extending privileges similar to those enjoyed by Italian cities to provincial cities began to take shape during this period.

Augustus, the first Roman Emperor (27 BC-AD 14), formalised the practice of granting special legal statuses to provincial cities. Even if some cities had already been granted the *Ius Italicum* before his reign, he is Roman leader associated with the spread of this privilege. The status was granted selectively to cities that demonstrated loyalty, strategic importance, or economic potential. It became a tool for Romanisation, encouraging local elites to adopt Roman culture and governance practices (Watkins, 1983; Jacques and Scheid, 1990; Chastagnol, 1995).

Importantly, cities granted the *Ius Italicum* were treated as if it were in Italy, and they could benefit from immense privileges compared to the general status of provinces. These included property rights, taxation and legal advantages. These privileges stemmed from the fact that each person living in these cities automatically acquired Roman citizenship when they were granted the *Ius Italicum*.

Outside of the Italian soil, these cities were therefore the only places where people could obtain complete legal rights over land, which was know as *Quiritarian* property. As land ownership was governed by Roman property law rather than provincial laws, this also increased the security of these property rights that could be defended in front of a Roman court. Moreover, cities with *Ius Italicum* were exempt from the land tax based on the size of landholdings and their quality (*Tributum Soli*) (Beaudouin, 1881a,b; Hurlet, 2009). This exemption applied to the agricultural land within the city's territory, making land ownership more attractive and economically beneficial in these areas[34]. These privileges remained unchanged until the fall of the Western Roman Empire, and therefore conferred citizens living in the cities granted the *Ius Italicum* incentives to acquire land during nearly 400 years[35].

The hypothesis followed here is that places located closer to the cities granted the *Ius Italicum* were more likely to be influenced by the Roman legislation on land ownership. I therefore expect them to have developed more secure property rights over time in their local legislation. This contributed to increase the concentration of freehold land within these regions. As the Franks didn't significantly modify the existing rules on land ownership and largely adopted Roman law after they invaded Gaul, the distribution of land ownership at the local level is unlikely to have been modified after the fall of Western Roman Empire.

[33]These privileges could include: the right to trade with Roman citizens on equal status (*Ius commercii*), the right to migrate without losing the Latin status (*Ius migrationis*), the right to marry (*Ius connubii*), the right to become Roman citizens (*Ius civitatis mutandae*) (Chastagnol, 1995).

[34]They were also exempt from the poll tax (*Tributum Capitis*) which was levied on individuals in the provinces.

[35]It is true that the *Constitutio Antoniniana* (AD 212) by Emperor Caracalla extended citizenship to all free inhabitants of the Empire, diminishing the distinctiveness of *Ius Italicum*. However, the evaluation of taxes paid by the provinces reveals that this edict didn't significantly contribute to spread the land exemption association with this status (Besson, 2020). Therefore, the incentive to acquire land, and the secure property rights associated with *Ius Italicum* didn't become universal within the Roman Empire after the edict was established.

As a consequence, I expect local communities closer to the cities who had been granted the *Ius Italicum* to have maintained a higher concentration of freehold land over time. These areas likely resisted the progressive takeover by royal and feudal powers more strongly, and especially their growing control over land ownership. The hypothesis of a strong connection between Roman law and the presence of freehold land over time has already been formulated by several historians, among which (Chénon, 1888; Lanéry d'Arc, 1888; Boutruche, 1968; Chianéa, 1969; Aubin, 1989).

If these hypotheses are verified, the probability for a municipality to be characterised by freehold land toponyms should be higher when located closer to the *Ius Italicum* towns. To investigate this point, I collected data on the towns that benefited from this privileged status. This information stems from (Beaudouin, 1881a,b; Watkins, 1983) who base their analysis on the *Natural History* of Pliny the Elder (AD 77) and the *Digest*, which is a summary of juristic writings on Roman law, compiled by order of the Byzantine Emperor Justinian I between 530 and 533 AD.

From these sources, I identified 51 towns that were granted the *Ius Italicum* between 138 BC and the reign of Heliogabalus (AD 218 - AD 222). The full list is reported in Table A12. Most of the towns still exist today, as only 13 of them disappeared. 5 towns were granted the status during the Roman Republic (11 if the ones who received the status during the "reign" of Julius Caesar are included), 29 during the reign of Augustus, and 11 after his death (see Table A13). There were concentrated in 15 current countries: Albania, Algeria, France, Germany, Greece, Italy[36], Lebanon, Libya, North Macedonia, Portugal, Romania, Spain, Syria, Tunisia and Turkey. Spain is the country with the highest number of towns (8), followed by Algeria and France (6 towns each) (Figure B30 displays their location on a map).

In France the cities of Lyon (43 BC), Orange (35 BC), Narbonne and Vienne (under Julius Caesar), Béziers and Fréjus (Under Augustus) were granted the *Ius Italicum*. Therefore, these towns benefited from the privileges associated with this status for an extended period, as they were all granted the status before AD 14.

I therefore compute the distance between the centroid of municipalities and the *Ius Italicum* towns. Not a lot of towns enter this computation: the 6 French ones, Barcelona, Zaragoza and Cologne. As a consequence, the distance from to these towns can be high and increase up to 800 kilometres, with an average value of 274 (see Figure B31). I will therefore implement restrictions on this distance as a robustness check, which won't modify the significance of the outcomes[37].

[36]The town of Termini Imerese is located in Sicily, which didn't take part in the Social War. Roman citizenship was therefore not extended to this province.

[37]The privileges associated with the *Ius Italicum* status were not restricted to the urban area of the towns (the *oppidum*), but to all the *territorium* that was under the control of the city. However, as it is difficult to map precisely the extent of this territory, I will stick to the distance to the towns' centre. I also don't use the distance to towns granted the *Ius Latii* as it is only the magistrates that could become Roman citizens after the end of their term (Hurlet, 2009). The complete and secure land ownership privilege and tax exemption associated with *Ius Italicum* were therefore not common within the *Ius Latii* towns, as the vast majority their inhabitants were not Roman citizens (Jacques and Scheid, 1990; Chastagnol, 1995).

Table 3 shows that the (log of the) distance to *Ius Italicum* towns is negatively related to the probability for a municipality to be located in areas where the customary law was more favourable to freehold land. The same is true for the probability of having a freehold land toponymy. A one-percent increase in the distance causes a reduction of respectively 4.5 and 2.4 percentage points of being characterised by freehold land in the historical or current toponymy. Logically, the distance to *Ius Italicum* towns is positively associated with the distance to freehold land toponymy.

All the estimates are significant at the one-percent levels, which testifies of the very strong relationship between the land ownership privileges obtained thanks to the *Ius Italicum* and the subsequent presence of freehold land at the municipality level. It is impressive to see that this relationship remains significant even when using the current toponymy. This shows that the Roman legislation on land ownership had a strong and long-lasting effect on the social and economic structure of municipalities and most notably the concentration of freehold land. This finding is in compliance with other studies showing an enduring effect of the Roman communication network on trade and development (Wahl, 2017; Dalgaard et al., 2022; Flückiger et al., 2022)[38].

Table 3: First-stage estimations - Distance to *Ius Italicum* and freehold land

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		Freehold land toponymy		Distance to freehold land toponymy			Freehold land toponymy		ln Distance to freehold land toponymy	
	Freehold law	Historical	Current	Historical	Current	Freehold law	Historical	Current	Historical	Current
Distance to *Ius Italicum*	-0.003***	-0.0004***	-0.0002***	0.001***	0.001***	–	–	–	–	–
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)					
ln Distance to *Ius Italicum*	–	–	–	–	–	-0.390***	-0.044***	-0.024***	0.192***	0.128***
						(0.029)	(0.009)	(0.004)	(0.038)	(0.030)
Distance controls	X	X	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X	X	X
Observations	35785	19837	35785	19433	35785	35785	19837	35785	19433	35785
R^2	0.623	0.020	0.006	0.046	0.030	0.491	0.017	0.005	0.047	0.027

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Freehold law is a binary variable which is equal to one if the municipality is located within the area where the legislation was favourable to freehold land (Hesse, 1979). Historical freehold land toponymy is also a binary variable which are equal to one if the historical toponymy of the municipalities refers to freehold land (CTHS, 2020). The current toponymy variable is the exact equivalent, but relying on the current toponymy of the municipality only (CDIP, 2006). Distance to *Ius Italicum* is reported in kilometres. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: ruggedness and wheat suitability. The legislation on freehold land property is also controlled for. Standard errors are clustered at the district level.

4.4 Exclusion Restriction

The main threat on the reliability of the instrument used is its potential association with the Roman road network. As being connected to this network entailed strong economic advantages

[38] I can't implement a spatial regression discontinuity design based on customary laws in the spirit of what is done in (Gay et al., 2023). From Figure B9, one could consider localities close to the frontier separating customary laws favourable to freehold land to those that were not. Parishes located in the favourable area should be characterised by a higher concentration of freehold land and a stronger support for democratisation following this rationale. However, the non-favourable customary laws made it more challenging for commoners to acquire or retain freehold land, but they didn't prohibit it except in the region of Brittany. It is therefore unlikely that this difference in legislation influenced strongly the presence of freehold land in a restricted strip of land close to the frontier, especially since neighbouring customary laws were often simultaneously used to judge cases at judicial borders (Gay et al., 2024a). In Figure B32, I therefore logically find no significant association between the distance to the customary laws frontier, freehold land and several political outcomes.

in the long run, the distance to *Ius Italicum* towns may also be correlated to the development path of local places. In Table A14, I more generally look at the potential correlation with Roman roads, waterways, bishop and archbishop seats, universities and Dominican monasteries. The distance to *Ius Italicum* is only weakly associated (significant at a ten-percent level) to the distance to navigable rivers and coastline, but to none of the other variables. Once I control for the other distances, the significance of the correlation with waterways also disappears. This is reassuring as it means that the effect of the instrument is not correlated to the strong end persistent influence of the Roman network. The instrument is also largely independent from the other factors that may have favoured the economic development of municipalities in the long run or their propensity to resist authoritarianism.

I however find a significant positive correlation between the distance to *Ius Italicum* and wheat suitability, and a negative one with terrain ruggedness. However, this correlation completely disappears when the average altitude of municipalities is controlled for (see Table A15). I will therefore run a robustness check with this altitude as an additional control variable, which will not modify the significance of the relationship between freehold land and the resistance to authoritarianism.

As I will also use the same IV strategy on nineteenth-century outcomes related to democratisation, I ensure that the instrument is not significantly correlated with various development indicators from that period. The distance to *Ius Italicum* is not significantly linked to the presence of industrial factors, workers and steam engines collected from the national Industrial Survey of 1839-1847. It is also orthogonal to the level of postal taxes stemming from the Postal Survey of 1847. This level, which was proportionate to the volume of letters sent and received, is considered to be a reliable proxy for economic dynamism at a time when the correspondence was largely due to commercial motives (Chartier et al., 1991). The instrument is also unrelated to the population of municipalities between 1793 and 1906 (see Table A16 and Table A17). All in all, these estimations indicate that the distance to *Ius Italicum* constitutes a reliable instrument, when working both on Ancien Régime and nineteenth-century outcomes.

5 Resistance to State, Local authorities and Feudalism

5.1 Anti-feudal Revolts and Rebellions Against the Absolute Monarchy

It is worth starting this subsection by mentioning that, descriptively, municipalities characterised by freehold land toponymy had a much higher probability to rebel. 6.5% of them rebelled against the state and local authorities and 3.7% against feudalism when considering the historical toponymy, against 2.2% and 1.9% of their counterparts without freehold land. The percentages based on the current toponymy are respectively of 5.2% and 2.9% against 2.6% and 2.3%.

Table 4 presents the baseline estimation of the effect of freehold land on resistance to state, local authorities and feudalism. In all estimations, I control by the *Freehold law* variables which indicates if the customary law was favourable to freehold land or not. I do so to avoid having the municipality-level effect partly driven by the favourable regional legislation on land ownership. I also consider the log of all distances included in the estimations instead of the original variables to make the interpretation easier. For all IV estimations, the Sanderson-Windmeijer F-stat is always superior to ten, which tends to exclude the issue of weak instrument and increases the reliability of these estimations.

Both OLS and IV estimations show a negative and strongly significant relationship between the distance to municipalities with freehold land toponymy and the resistance to state and local authorities. An increase of one percent in this distance is related to a fall of the probability to rebel comprised between 1 and 15 percentage points, depending on whether one considers the historical or current toponymy. The effect on the resistance to feudalism is also negative, between 1 and 7 percentage points. However, this impact is less consistently significant across the different estimations.

As described when introducing the data, resistance against feudalism was mostly related to ownership and usage of the land issues, while resistance to authorities was directed against the judicial and military authority of the state and its representatives. Therefore, this first set of results shows that the presence of freehold land didn't only prompt people into defending their land ownership rights. Indeed, the impact on the resistance to authoritarianism and the Absolute Monarchy (as most rebellions took place after 1600) was even stronger than the one on resistance to feudalism. Part of this results might be due to the fact that feudal lords were less likely to infringe on land ownership in areas where freehold land was more common. In any case, the results indicate that freehold land was a powerful force in resisting authoritarianism and reductions in the rule of law, whether these reductions stemmed from feudal lords' control over land ownership or from the judicial and military power of the king. These findings align with the idea originally developed in (Nicolas, 2014) through the study of the locations and characteristics of rebellions in France from 1661 to 1789. He indeed suggested that the prevalence of freehold land played a significant role in determining the concentration of rebellions during this period, which is confirmed by the estimations.

No other variable used in the estimation exhibit such a consistent effect on rebellions, except being located in the area where legislation was more favourable to freehold land. This increases the probability to rebel by around 2 percentage points. This variable's effect certainly reflect both the impact of the presence of freehold land that I fail to capture with the toponymy tool, and a regional mindset forged by freehold land which increased the probability to resist authoritarianism even for people who didn't own land. The distance to Dominican monasteries also had a negative impact on rebellions, which seems to confirm the effect on self-government identified by (Doucette, 2021).

Table 4: Freehold land, resistance to authority and feudalism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0141***	-0.1261***	–	–	-0.0056*	-0.0706	–	–
	(0.0024)	(0.0366)			(0.0028)	(0.0450)		
ln Distance to current freehold land toponymy	–	–	-0.0056***	-0.1489***	–	–	-0.0018	-0.0745**
			(0.0019)	(0.0388)			(0.0015)	(0.0370)
Freehold law	0.0196***	0.0385***	0.0158***	0.0398***	0.0122***	0.0232**	0.0056	0.0178**
	(0.0041)	(0.0095)	(0.0030)	(0.0083)	(0.0042)	(0.0098)	(0.0041)	(0.0080)
ln Distance to Roman roads	-0.0010	-0.0005	-0.0016	0.0025	0.0023	0.0027	0.0003	0.0024
	(0.0019)	(0.0032)	(0.0014)	(0.0026)	(0.0049)	(0.0051)	(0.0029)	(0.0036)
ln Distance to waterways	-0.0030	-0.0073**	-0.0005	0.0001	-0.0014	-0.0039	0.0003	0.0006
	(0.0019)	(0.0036)	(0.0016)	(0.0024)	(0.0027)	(0.0040)	(0.0019)	(0.0020)
ln Distance to universities	0.0070**	0.0048	0.0038	-0.0073	0.0130*	0.0118	0.0026	-0.0030
	(0.0035)	(0.0061)	(0.0027)	(0.0061)	(0.0076)	(0.0074)	(0.0048)	(0.0046)
ln Distance to bishopric centre	-0.0015	0.0032	-0.0046*	-0.0126**	0.0102*	0.0130*	0.0017	-0.0023
	(0.0037)	(0.0055)	(0.0027)	(0.0057)	(0.0054)	(0.0070)	(0.0032)	(0.0040)
ln Distance to Dominican monasteries	-0.0200***	-0.0158**	-0.0178***	-0.0070	-0.0185*	-0.0160*	-0.0117**	-0.0062
	(0.0042)	(0.0066)	(0.0033)	(0.0063)	(0.0101)	(0.0095)	(0.0053)	(0.0048)
ln Ruggedness	-0.0031	-0.0172***	-0.0002	-0.0086**	0.0036**	-0.0046	0.0055***	0.0013
	(0.0022)	(0.0063)	(0.0014)	(0.0038)	(0.0016)	(0.0057)	(0.0015)	(0.0027)
ln Wheat Suitability	-0.0106*	-0.0036	-0.0022	-0.0035	0.0017	0.0058	0.0013	0.0006
	(0.0061)	(0.0058)	(0.0016)	(0.0035)	(0.0037)	(0.0053)	(0.0020)	(0.0025)
Observations	19433	19433	35785	35785	19433	19433	35785	35785
R^2	0.016		0.008		0.012		0.004	
$F-stat$		20.358		21.148		20.358		21.148

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Standard errors are clustered at the district level.

In all the estimations, the IV estimates are larger than the OLS ones. This is most likely due an attenuation bias linked to measurement errors in the identification of freehold land based on toponymy (Hausman, 2001). Indeed, this tool enables me to pinpoint the location of municipalities where this type of land is very likely to have been highly concentrated or extremely important to defend for the inhabitants. However, toponyms could be affected by a variety of external factors unrelated to the effective presence of freehold land. It is for example possible to imagine that some toponyms initially associated with freehold land spread over other municipalities through imitation or the influence of migrants. In this case, the OLS estimations would provide an underestimation of the true effect of freehold land.

Finding a wider difference between least squares and 2sls estimates when using the current toponymy lends support to this hypothesis. Indeed, a relatively high proportion of toponyms is likely to have changed or disappeared from the nineteenth century. Therefore, there is a higher probability for current toponyms, theoretically linked to freehold land, to characterise municipalities where this type of land ownership was actually not highly concentrated before the nineteenth century. It follows that the correction induced by the IV strategy is expected to be stronger for the current than the historical toponymy in the case of measurement errors. This is exactly what is found in Table 4. When working with the current toponymy data, the

OLS estimations are thus relatively less reliable than the IV estimations compared to when using the historical toponymy[39].

To account for this problem, I also run the estimations at the *canton* level in Table 5, the administrative units just above the municipality level. Doing so, I consider the percentage of municipalities that rebelled and the percentage characterised by a freehold land toponymy within these administrative units[40]. Indeed, if measurement errors can be strong at the local level, the percentage of municipalities with freehold land is most likely a very reliable indicator of its concentration and variation between more aggregate geographical units. Moreover, if democratic values influenced by the presence of freehold land spread to nearby localities and cause rebellions, running the estimations at a more aggregate level will better capture these positive externalities. The results are in compliance with these assumptions, as the difference between the OLS and 2sls estimates is significantly reduced compared to Table 4. The effect on rebellions against feudalism is also more robust under this specification. A one standard deviation increase in the proportion of municipalities with freehold land (15 percentage points) is characterised by an increase between 0.75 and 8.1 percentage points of the proportion of municipalities which rebelled against authority, and between 0.57 and 5.3 percentage points for the rebellions against feudalism. These effects are very high considering the average proportions of places that resisted state authority or feudalism.

[39] A limitation of this analysis is that it relies on binary indicators for the presence of a rebellion without considering the number of rebels. A rebellion that gathered half of the population of a given locality would not mean the same thing in terms of resistance to authoritarianism compared to one that only gathered 2% of it. Unfortunately, information on the number of participants is only available for 410 rebellions against authorities and 197 against feudalism, which corresponds to respectively 255 and 100 municipalities. Applying restrictions on the number of participants within this limited subset of observations would be prevent any reliable quantitative analysis. On average, 85 persons took part in the first type of conflict, against 300 for the second type, with median values of respectively 17 and 35 rebels.

[40] I exclude the few units which were constituted of only one city and which could be characterised by a value of 100% as regards freehold land or the propensity to rebel. The *cantons* were on average composed of 13 municipalities. The instrument used in this specification is the average distance to the closest granted the *Ius Italicum*.

Table 5: Freehold land, resistance to authority and feudalism at the *canton* level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
Historical freehold land toponymy	0.0745***	0.3226***	–	–	0.0378**	0.1804**	–	–
	(0.0166)	(0.0788)			(0.0182)	(0.0792)		
Current freehold land toponymy	–	–	0.0475***	0.5419***	–	–	0.0056	0.3508***
			(0.0153)	(0.1152)			(0.0123)	(0.1144)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	1262	1262	2598	2598	1262	1262	2598	2598
R^2	0.069		0.036		0.065		0.026	
$F-stat$		57.644		47.954		57.644		47.954

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority corresponds to the percentage of municipalities that rebelled against state or local authority. Resistance to feudalism is the equivalent percentage for rebellions against feudalism. Historical freehold land toponymy is the percentage of municipalities with a toponymy associated to freehold land in the historical database. Current freehold land is the equivalent percentage computed from the current toponymic dataset. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Robust standard errors are computed.

These results remain significant under a battery or robustness checks.

Alternative independent variables

The use of an IV strategy in Table 4 should account for the potential reverse causality issue. To go one step further on this point, I restrict the freehold land toponyms to those reported before 1600 in Table A18. As the vast majority of rebellions took place after 1600, this excludes the potential cases in which a rebellion, happening in a municipality without freehold land, would enable the spread of free property and then influence the toponymy of the locality[41]. This restriction shrinks the sample used, as the date of first occurrence of a toponym is known for only around 44% of the cases. 40% of all toponyms are reported after 1600, and only 3.7% of all municipalities are linked to freehold land under this specification. The results remain significant, especially for the rebellions against the Absolute Monarchy.

In Table A19, I substitute binary variables equal to one if the municipality has a toponym linked to freehold land for the distance to these municipalities. This doesn't change the significance of the outcomes, which shows that freehold land municipalities were indeed characterised by a higher resistance against authoritarianism and feudalism. The magnitude of the effect is high in these estimations, as these municipalities are the ones where freehold land had the strongest influence on local communities.

However, the effect is not solely driven by these freehold land municipalities. Excluding them from the analysis (Table A20) shows that the distance is still significantly associated with

[41] Even if a toponym linked to freehold land appeared after 1600, it doesn't entail that this type of ownership was not present beforehand in the locality at stake. Under this restriction, only the localities with a freehold toponym recorded before 1600 are therefore considered to have a potential impact on rebellions.

the rebellions, especially in the IV specifications. This entails that municipalities located closer to the freehold land centres were more likely to be characterised by the presence of this type of ownership and therefore to resist authoritarianism more often. The significance of the results is also not modified when using an inverse hyperbolic sine transformation instead of taking the log of the distance (see Table A21).

In Table A22, I also exclude the top 25% of municipalities as regards their distance to towns granted the *Ius Italicum* (more than 367 kms). This is done to account for the fact a restricted number of municipalities without freehold land and located far away from these towns might drive the outcomes. Their significance is not affected by this restriction.

As the historical toponymy database is constituted by various toponymic dictionaries at the department level, it is also important to control for the fact that historians and archivists may have been more or less efficient in collecting toponyms. I identify two main potential issues here. First, the researchers might not have been equally diligent in collecting information about the places within municipalities. Second, even if they recorded the same number of places, they may not have recorded the same number of historical toponyms for each place[42].

In Table A23 and Table A24, I include two different control variables to account for these potential issues. First, I control for the density of places, defined as the average number of places per municipality reported in each department. Second, I control for the density of old names, defined as the average number of old names per place at the department level. The outcomes remain highly significant in each case, especially the effect on resistance to state and local authority.

Finally, in Table A25, I include the historical Brittany region in the estimations. In spite of the particular historical status of this region, doing so doesn't modify the magnitude and the significance of the outcomes.

Controlling for the legislation on inheritance prior to the Revolution might also be important here. Indeed, within an impartible system of inheritance, land property was fully transmitted to a single heir. This can have strengthened freehold land by reducing the probability that several heirs left with smaller pieces of land, within a partible system, would sell the land they owned because of the lower amount of resources they could draw from it. In Table A26, I control for the nature of the inheritance system, distinguishing between impartible and partible inheritance as defined in the customary laws before the Revolution (Gay et al., 2023)[43], which

[42]These issues might simply be due to the fact that a place had only one name throughout the period under scrutiny, or that only a few places had a name within a given municipality. However, it might also reveal a lack of diligence in collecting toponyms, or a lack of access to historical information.

[43]The data are available for the current territory of mainland France, except the Duchy of Savoy, the County of Nice, and the Comtat Venaissin. Partible inheritance customs could be strict or optional. In strict partible inheritance, heirs were required to divide the estate equally, including any gifts received during the deceased's lifetime. In optional partible inheritance, heirs could forgo their share of the inheritance in favour of retaining any prior gifts. Impartible inheritance customs prioritised a single heir, favouring either the firstborn (primogeniture), the youngest (ultimogeniture), or any chosen offspring (unigeniture). Women could be either included or excluded from inheritance rights. Figure B33 in Appendix reproduces the geographical distribution of partible and impartible inheritance studied in (Gay et al., 2023).

doesn't modify the outcomes.

Alternative dependent variables

All along the paper, I consider the nineteenth-century French municipalities as units of observation. However, the borders of France, especially the northern and eastern ones, were modified from the early seventeenth century to the Revolution. This might affect the study of rebellions, as some areas included in the baseline estimations didn't belong to the Kingdom of France during this period. For instance, the Alsace, Franche-Comté regions or the extreme north of the country belonged to the Holy Roman Empire before being progressively integrated into the Kingdom of France during the seventeenth century. In order to have a consistent set of observations, and to keep only rebellions against the French feudal lords or king, I restrict the analysis to the French territory as defined at the beginning of the seventeenth century (see Figure B34). Doing so, I exclude around 19% of the municipalities, which doesn't modify the significance of the outcomes (Table A27).

In Table A28, I also exclude the municipalities that will become the administrative centres of departments or districts after the Revolution. This is done to account for the fact that the effect on resistance might be partly driven by the economic and administrative centres where rebellions took place more often. The results show that that this doesn't affect at all the estimations, and therefore that the effect is not due to a restricted number of relatively bigger towns.

As specified before, the vast majority of rebellions took place after 1600, which is why I interpret the results on rebellions against authority as resistance to the Absolute Monarchy and its representatives. In Table A29, I exclude the few rebellions that are recorded prior to this date, which doesn't affect the results.

Additional determinants of resistance

It is important to control for the financial organisation of provinces when studying the effect on rebellions. During the Absolute Monarchy in France, there existed three statuses with different financial regulations: the *pays d'etats*, *pays d'élection* and *pays d'imposition*. A *pays d'etats* is a province that had provincial estates, a representative assembly of the three orders (clergy, nobility, and the third estate). The role of the provincial estates was to negotiate each year the amount of the province's tax with the intendant, the king's representative. Like the Estates General, the provincial estates represented a constraint on the absolute power of the king (Barbiche, 1999)[44]. The relative liberty associated with living in a *pays d'etats* might therefore have encouraged people in rebelling against the authority of the king or the feudal lords. I collected information on the location of the *pays d'etats* (see Figure B35), and added it

[44]Within the *pays d'élection*, it was the intendant who allocated taxes with the help of people elected by the Estates General, hence the name of *pays d'élection*. However, from 1614 to 1789, the Estates General did not convene, and during this period, the King appointed the persons who should have been elected. The *pays d'imposition* are territories annexed from 1648, where fiscal authority was also delegated to the intendant. In both types of provinces, contrary to the *pays d'etats*, the fiscal organisation was therefore directly places under the authority of the king.

as an additional control in the estimations (see Table A30)[45]. This doesn't modify the outcomes, even though, as expected, being located in a *pays d'etats* increased the probability to rebel, by around one percentage point.

In the same spirit, I include the distance to French cities that had a form of self-governance from 1000 to 1800, the *Communes*, taken from (Bosker et al., 2013) (see Figure B36). The political liberty associated to self-governance might have influenced the population living in the nearby areas. The estimations are robust to the inclusion of this additional control (see Table A31).

As additional robustness checks, I also control for the location of Cluniac monasteries (see Figure B37 and Table A32), the altitude of municipalities (Table A33) and suitability indices for barley, buckwheat, oat and rye (Table A34). The first check is based on the study of (Doucette and Møller, 2021) who show that the Cluniac movement influenced the establishment of autonomous town councils between 1000 and 1200. I therefore control for the same variable they use, the presence of Cluniac monasteries established by 1109. The second check is linked to the fact that the correlation between the instrument, ruggedness and wheat suitability disappears when the average altitude is introduced. Finally, other cereal suitability indices are used to better control for agricultural wealth. The outcomes remain significant, while the Cluniac movement has no effect on rebellions and altitude is negatively correlated to resistance against authorities.

I also control for the fact that freehold land might have contributed to create a more general culture of rebellion. If this is true, resistance to authorities and feudalism would simply be a proxy for this culture, and for a higher propensity to rebel which would once in a while target feudal lords and authorities. One might fear that this would be partly the case, as around 50% of municipalities which resisted authorities also rebelled for another type of reason, and 31% of those which rebelled against feudalism. However, if this effect is true, controlling for the presence of other rebellions should make the freehold land impact lose its significance. As shown in Table A35, the significance is not affected by this additional control, which indicates that the resistance to authoritarianism was not driven by a general culture of rebellion.

5.2 The Revolutionary Period

Knowing that the long-term presence of freehold land was a strong determinant of rebellions against the Absolute Monarchy and feudalism in France, one could logically wonder if freehold land influenced the Revolution. The assessment of its determinants has garnered increased attention recently.

Using the 299 peasant revolts which took place during the summer of 1789 (collected from (Lefebvre, 1988)), (Waldinger, 2023) shows that the severity of the 1788 drought contributed to increase the participation of cantons to the the revolts against the feudal system. These

[45]The location is determined in 1789. The borders of the *pays d'etats* changed from the early seventeenth century. Some provincial estates were indeed suppressed, as the Dauphiné or the Bazadais estates in 1628 and 1621 (Barbiche, 1999). The map therefore provides the best approximation of provinces that managed to defend their provincial estates. Around 31% of the municipalities were identified as belonging to this type of province.

cantons were also the ones that expressed the highest demand for institutional change as measured from the lists of grievances. Using the data from (Chambru and Maneuvrier-Hervieu, 2024) which specify the type of each rebellion and focusing on anti-feudal revolts, (Ottinger and Rosenberger, 2023) show that French veterans deployed to the North American colonies during the American War of Independence were linked to the local support for the French Revolution in their birthplaces. These outcomes indicate that the prolonged exposure to non-feudal institutions and political liberty likely transformed these veterans into advocates for institutional change[46].

A detailed examination of the rebellions that took place from 1789 to 1792 thanks to the HiSCoD database reveals that the majority of the revolts were associated with subsistence issues over the availability or the price of food. Over the 739 revolts recorded in 1789[47], 52% were linked to subsistence problems, and 37% targeted the feudal institution. This explains why the bad harvest of 1788 appears a strong determinant of the revolts which took place one year later (Waldinger, 2023).

In Table A36, I focus on the 550 rebellions against feudalism that took place in 503 municipalities between 1789 and 1792, as in (Ottinger and Rosenberger, 2023). The results are mixed, with a clear significant impact of the freehold land variable based in the historical toponymy. However, this effect is only significant using the OLS estimations, and I find no significant impact using the current toponymy.

These outcomes indicate that the presence of freehold land didn't itself cause the French Revolution. It can't be considered as a strong determinant of the rebellions of this period compared to more contemporary shocks as the 1788 drought or the American War of Independence. This type of land ownership had a more general impact on the resistance to feudal lord and the authority of the king during the Absolute Monarchy. Freehold land served as a structural factor that encouraged local communities to strive for and defend their independence from the king and feudal lords. While it contributed to the long-term resilience of these communities, it did not cause the 1789-1792 rebellions, which were largely driven by subsistence issues and widespread "panics". Excluding these rebellions from the estimations therefore doesn't modify the significance of the outcomes (see Table A37).

6 Democratisation and the Consolidation of Democracy

Freehold land constituted a strong driver of the resistance to authoritarianism from 1600 to the Revolution in France. In this section, I investigate its impact on the process of democratisation which took place during the 19th century in France. I also provide a case study based

[46](Ottinger and Rosenberger, 2023) also use the location of political clubs, the volunteers for the revolutionary army and the emigration of the old elite as indicators of local support for the Revolution. I will also use the presence of political societies in the Transmission Channels section. I however leave aside the two other indicators, as they are not available at the municipality level.

[47]Before the abolition of the feudal privileges in August.

on the districts of Bordeaux and Bazas for which precise data on the location of freehold land during the Middles Ages could be obtained.

6.1 The Electoral Support for the Republicans

In Table 6, I report the estimations of the impact of freehold land on the support for the Republicans during the elections of the Second and Third Republic. The Second Republic elections considered are the legislative elections of 1848, 1849 and the presidential election of 1848. The Third Republic elections considered are the legislative elections of 1876, 1881, 1885 and 1889. For both periods, the support for the Republicans is measured as the log of the average Republican share of votes.

The outcomes indicate that freehold land was significantly associated with support for the Republican coalition in both periods. A one percent increase in the distance to this type of land ownership was linked to a reduction in the support for the Republicans comprised between 0.07 and 2 percent, depending on whether the one considers the historical or current toponymy. Regarding the Third Republic elections, the effect lies between 0.02 and 1.4 percent.

Therefore, in municipalities where freehold land had been historically absent or uncommon, the *Parti de L'Ordre*, composed of Monarchists hostile to the Second Republic institutions, received a higher support. The electoral victory of this party in the 1849 legislative election played a crucial role in bolstering the position of the new president, Louis-Napoléon Bonaparte. This created a window of opportunity that ultimately led to the coup on December 2, 1851, and the proclamation of the Second Empire exactly one year later. Regarding the Third Republic elections, the adversaries of the Republicans, namely the Monarchists, Bonapartists and Boulanger supporters, also benefited from a higher share of votes from municipalities more distant from historical freehold land centres. The first elections that took place after the establishment of the Third Republic in 1870 were instrumental in consolidating the new regime and strengthening the new institutions which would last until 1940. Municipalities with freehold land prior to the Revolution thus played a significant role in the democratic consolidation of France, and contributed to speed up one of the most important process of French political history.

Table 6: Freehold land and electoral support for the Republicans

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Second Republic elections				Third Republic elections			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0688***	-1.2663***	–	–	-0.0207	-0.3579**	–	–
	(0.0174)	(0.3389)			(0.0126)	(0.1689)		
ln Distance to current freehold land toponymy	–	–	0.0039	-2.0100***	–	–	0.0032	-1.3845**
			(0.0123)	(0.5342)			(0.0110)	(0.5647)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	17201	17201	30991	30991	18282	18282	34002	34002
R^2	0.081		0.058		0.114		0.103	
$F-stat$		17.795		18.311		17.532		8.633

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: The Second Republic elections considered are the legislative elections of 1848, 1849 and the presidential election of 1848. The Third Republic elections considered are the legislative elections of 1876, 1881, 1885 and 1889. For both periods, the support for the Republicans is measured as the log of the Republican share of votes. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

The impact of the historical presence of freehold land is robust to several checks. The first set of estimations uses alternative dependent variables and not the average support for the Republicans during several elections. The second set gathers additional potential determinants of the democratic consolidation. As done in Table A18 for the Ancien-Régime outcomes, I also restrict the sample of toponyms used in Table A38 to exclude any potential reverse causality problem. Only the toponyms reported before the first election considered in 1848, or before the Revolution in 1789, are used to compute the distance to historical freehold land. This second restriction is used to account for the fact that some municipalities, through an imitation process, may have adopted toponyms linked to freehold land after the Revolution without being characterised by a higher concentration of free property during the Ancien Régime. The outcomes remain significant under these restrictions.

Alternative dependent variables

The electoral support variable used in Table 6 aggregates the Republican share of votes for all elections of the Second Republic and four elections of the Third Republic. However, external factors influenced the results of some elections and the support for the Republicans. One might therefore fear that this electoral would not always truthfully reveal the democratic character of voters. This is especially the case for the 1848 legislative and presidential elections.

Indeed, the 1848 legislative election occurred just one month after the February Revolution, which overthrew King Louis-Philippe and established the Second Republic. Consequently, support for the Republicans was exceptionally high in 1848, with the Republicans receiving 77% of the votes at the country level compared to 42% just a year later in 1849. This election is often viewed as less representative of the "true" political alignment of the country, as its outcomes were influenced by the upheaval of the February Revolution and the rejection of the July Monarchy, rather than genuine support for a democratic regime. Similarly, the overwhelming

support for Louis-Napoléon Bonaparte in the December 1848 presidential election, where he received around 74% of the votes, is typically seen as a conservative reaction to the popular excesses of 1848 (Agulhon, 2016). This election might therefore also provide a distorted view of the support for the Republicans.

In Table A39, I exclude alternatively the 1848 presidential election and the 1848 legislative election to control for these potential issues. In Table A40, I also look at the effect of freehold land on each election separately. The outcomes remain significant under each specification. The magnitude of the effect on Republican support is also higher for the 1849 legislation election which is supposed to provide the most reliable indication of the political alignment of municipalities. This reinforces even more the idea that the historical presence of freehold land was a strong driver of the democratic consolidation in France.

The Third Republic elections are less subject to the same type of issue. Indeed, six years separate the establishment of this Republic and the first election in 1876, and five years had passed since the end of the Franco-Prussian War. Therefore, the election results were not affected by the turmoil of a nearby revolution, unlike those of the Second Republic. Nonetheless, I also decompose the estimations by election year in Table A41 for the Third Republic. The outcomes, especially the IV ones, remain significant, even though freehold land doesn't seem to have significantly contributed to the electoral results of the 1885 legislative election.

Additional determinants of democratisation

In Table A42, I use control variables contemporary to the elections instead of relying on the same land and distance controls than for the pre-nineteenth century estimations. I include population and industrial controls, along with an indicator of potato suitability, as potato cultivation significantly increased during the nineteenth century. Doing so doesn't modify the significance of the estimates or their magnitude.

I also control for the influence of religion, the share of people who emigrated during the revolutionary period, and the level of taxes per capita at the department level in Table A43, Table A44 and Table A45. Religion has indeed been identified as a potential strong driver of electoral outcomes during the nineteenth century (Salmon, 2001; Agulhon, 2016). I therefore add to the baseline estimations the share of the French clergy who agreed to sign the 1790 Civil Constitution of the Clergy as a proxy for secularisation of the society[48]. This proxy is positively and significantly correlated to the support the Republicans during the Third Republic elections. It is negatively but less significantly associated with this support for the Second Republic, most likely because of the support of the Brittany region for the Republican coalition during the 1848 legislative and presidential elections.

The inclusion of the share of people who emigrated (taken from (Greer, 1951)) is based on

[48]This Constitution profoundly restructured the French Church. It abolished tithes, nationalised Church lands, reduced the number of religious orders, and required citizens to elect bishops and priests. The National Assembly mandated that the clergy take an oath of allegiance to this Constitution, but a significant percentage of priests, approximately 44% across all French departments, refused to comply.This proxy, which stems from the work of (Tackett, 1986), constitutes a reliable proxy for the geographical distribution of religiosity in France, at least until World War II (Squicciarini, 2020).

the fact that this emigration was mostly composed of landowners, which tended to reduce rural inequalities (Franck and Michalopoulos, 2017) and could therefore influence political outcomes (Montalbo, 2023). The level of taxes per capita positively influenced the Republican support during the first elections of the Third Republic (Franck, 2016), which is why I include it as an additional control. The freehold land estimates remain significant under each specification.

6.2 Resistance to the 1851 Coup

The historical presence of freehold land prior to the nineteenth century influenced strongly the support for the Republicans during the elections of the Second and Third Republic. These municipalities therefore contributed to a stronger and more rapid consolidation of the democracy in France. I consider here another proxy for the willingness to support democratisation at the municipality level, the resistance to the 1851 coup of Louis-Napoléon Bonaparte. This proxy echoes the pre-nineteenth century rebellions studied in Section 5, and provides information on the communities that were willing to fight in order to defend the Second Republic and avoid its replacement by an autocratic regime.

As explained in the Data section, I consider the birthplaces of people prosecuted after the 1851 coup. The idea is therefore to evaluate if the municipalities characterised by the presence freehold land prior to the nineteenth century "produced" more people willing to fight for the Second Republic. I look at the municipality of birth, as this is the place whose economic and social characteristics are most likely to have influenced people's political opinions.

To capture the intensity of the resistance to the 1851 coup, I also collected information on the court decisions. This information is available for 24,404 persons, which corresponds to 91% of all the people prosecuted. Table A46 details the court decisions and sanctions. Around 20% and 17% of the people prosecuted were respectively put under surveillance or set completely free. Around 42% of them were deported away from France, nearly always to Algeria for a period varying between 5 and 10 years, where 17% of the prosecuted were also put under house arrest (Farcy and Fry, 2018). 10.5% were condemned to being imprisoned in France. The remaining 10% correspond to milder sanctions as correctional sentences, but also to closed or dismissed cases[49].

I therefore created a new binary variable to indicate whether the municipality in question was the birthplace of at least one person sentenced to a heavy penalty. This variable includes all cases of deportation, removal orders, imprisonment, and court-martial sentences, which were reserved for those prosecuted and convicted of murder or attempted murder. These heavy penalties represent around 55% of all the prosecuted people. 14.6% of all municipalities were birthplaces of people prosecuted, while 9.5% of them were birthplaces of people sentenced to a heavy penalty.

[49]Importantly, the trial procedure was kept secret, and the defendants were not allowed to appear in court to present their defence. Consequently, the severity of the court decisions could not be influenced by factors such as the quality of the lawyers.

Table 7 reports the estimation outcomes. The freehold land variables are negatively and very significantly associated with both the probability for a municipality to have been the birthplace of people prosecuted and sentenced to a heavy penalty after the 1851 coup. The magnitude is substantial, as a one-percent increase in the distance to freehold land is associated with a fall of 2 percentage points in both probabilities within the OLS estimations, but of more than 50 percentage points within the IV ones.

Interestingly, the magnitude of the coefficients for heavy penalties is very similar to those for prosecutions. This suggests that freehold land had a long-term impact on people's willingness to defend the Republic, encouraging the most extreme and committed forms of defence. People born and raised in municipalities where freehold land was more common before the nineteenth century were therefore not only willing to vote in support of democracy but also ready to fight for it, even at the risk of heavy penalties such as imprisonment and deportation.

In Table 7, I only use binary variables to characterise the birthplace of rebels, as 57% of them were linked to only one rebel, and 91% to less than 10. In Table A47, I rely on an alternative specification using the percentage of rebels and rebels with heavy penalties relative the population of potential birthplaces. This also returns very significant results. Finally, in Table A48, I consider the place of residence of people prosecuted instead of their place of birth. One might indeed defend the idea that the economic and social characteristics of municipalities can have a strong influence on people's living within their boundaries, even if their primary socialisation took place in another one. This seems to have been the case as, even after controlling for having been a birthplace, municipalities were more likely to be the place of residence of rebels when located closer to freehold land centres. These centres had therefore a very strong effect on democratic values, for people either born in their vicinity or who came to live there later.

Table 7: Freehold land and resistance to the 1851 coup d'état of Napoléon Bonaparte

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Municipality with people prosecuted				Municipality with heavy penalty			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0312***	-0.6937***	–	–	-0.0274***	-0.5728***	–	–
	(0.0064)	(0.2075)			(0.0050)	(0.1770)		
ln Distance to current freehold land toponymy	–	–	-0.0189***	-0.8436***	–	–	-0.0180***	-0.7233***
			(0.0053)	(0.2088)			(0.0045)	(0.1844)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	34994	34994	19433	19433	34994	34994
R^2	0.028		0.025		0.030		0.028	
$F-stat$		20.358		22.419		20.358		22.419

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Municipality with people prosecuted is a binary variable equal to one if at least one person born in this municipality was prosecuted after the 1851 coup d'état. Municipality with heavy penalty is a similar binary variable for prosecuted people who were heavily sentenced. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

6.3 Case Study: the Districts of Bordeaux and Bazas

Throughout the paper, I use the toponymy to evaluate the areas where freehold land was more common from the Frankish invasions to the Revolution. I showed that this tool was efficient in capturing the presence of this type of land ownership. Thanks to the study of legal documents and cartularies, some mediaevalists provide accounts of the exact presence of freehold land during the Middle Ages[50]. Unfortunately, the geographical area under scrutiny and within which it is possible to evaluate the presence of such land is often too restricted to allow any quantitative analysis.

A global survey of the presence of freehold land was however undertaken within the historical Guyenne province in the south-west of France. The province was part of the Kingdom of England from 1154 until the Battle of Castillon in 1453. This battle, the final one of the Hundred Years' War, resulted in Guyenne being reintegrated into the Kingdom of France. During the reign of Edward I of England, a detailed assessment of land properties was conducted. This survey took place between 1273 and 1275 and was published in a document titled *Recogniciones feodorum in Aquitania*. It is considered highly accurate, as anyone found to misreport their landholding would see their properties being confiscated.

For the areas that correspond nowadays to the districts of Bordeaux and Bazas, it is possible to know precisely the location of freehold land. For the remaining part of the Guyenne province, the information on its location is unfortunately too imprecise. I collected information on freehold land from (Boutruche, 1947), who indicates what municipalities were characterised by the presence of this type of land ownership in the *Recogniciones feodorum in Aquitania*. The two districts gather 229 municipalities in the database (158 for the Bordeaux district and 71 for the Bazas one). Freehold land is identified as having been present in 42% of them at the end of the 13th century (see Figure B38)[51]. More generally, according to (Boutruche, 1947), approximately 10% of all the lands within the two districts were freehold at that time.

Among the 96 cases of municipalities with freehold land, only 6 are also identified thanks to the current toponymy[52]. The Gironde department is unfortunately not included in the historical toponymy database, which would most likely have led to a higher correlation between the two measures. This is however instructive, as it shows that the current toponymy may miss a lot of municipalities where freehold land existed, and only select those where its presence was extremely common and long-lasting. Indeed, when confronted with the ongoing attacks on freehold land by royal authority starting in the early 16th century, the town council and Parliament of Bordeaux more vigorously defended the legal right to complete land ownership in the Bordeaux area than in the rest of the Guyenne province (Boutruche, 1947; Aubin, 1989).

[50] This information is for instance available for part of the *Mâconnais* region for the 11th and 12th centuries (Duby, 1953).

[51] To be extremely precise on this point, it has to be noted that (Boutruche, 1947) complemented the *Recogniciones feodorum in Aquitania* by his own research for the 14th century. Around one-third of the municipalities with freehold land are identified from this additional work. It is the combination of both that provides the information on the location of freehold land for the districts of Bordeaux and Bazas.

[52] The municipalities are: Ambarès-et-Lagrave, Barsac, Baurec, Cestas, Pessac and Saint-Loubès.

One would therefore expect to find more freehold land municipalities, as identified in the current toponymy, around Bordeaux. This is indeed the case, as 4 out of the 6 municipalities are located less than 10 kilometres away from this city. This selection, and the measurement errors associated with it, also explain why the OLS and IV estimates differ more strongly for the current toponymy.

In Table 8, I evaluate the freehold land effect on the presence of political clubs during the Revolution and on the support for the Republicans during the 19th century[53]. I stick to OLS estimations in this case, as the variation in the distance to towns granted the *Ius Italicum* for such a small geographical unit is too restricted to obtain a strong instrument. Descriptively, there is a positive association between both political outcomes and the presence of freehold land. Indeed, 19% of the municipalities without freehold land had a political club, against 29% of those identified in the *Recogniciones feodorum in Aquitania*. Over the 19th century, the support for the Republicans was of 47% in the first category of municipalities, against 52% for the counterparts with freehold land.

The estimation outcomes indicate that the presence of freehold land in the Late Middles Ages positively influenced the presence of political societies and the support for the Republicans[54]. Indeed, this presence was associated with a increase of 18 percentage points in the probability for a municipality to have a political club, and with a higher support for the democracy comprised between 6.5 and 17.4 percent. Municipalities with freehold land were therefore characterised by a higher support for the ideas of the Revolution, a higher democratic sociability and more actively participated in the consolidation of democracy in France. Therefore, these results confirm the findings obtained thanks to the toponymic tool. They also reinforce the idea that freehold land had a strong and long-lasting impact on democratisation.

[53] I don't consider the Ancien Régime rebellions and the ones against the 1851 coup. Indeed, only 8 municipalities rebelled against the authority of the king during the Absolute Monarchy, and 4 against feudalism. Over the two districts, only 14 municipalities were the birthplaces of people prosecuted after the 1851 coup, which doesn't allow any quantitative analysis. On the contrary, 53 municipalities had a political club.

[54] In column (1) the controls included as the ones used in the baseline estimations on rebellions. For all the other estimations, I use the nineteenth-century control variables instead, the same than in Table A42. Indeed, the population level and the presence of industrial activities have be found to be highly correlated to the support for the Republicans during the early Third Republic in this region (Goasguen, 1971). I therefore include these variables to more adequately control for the effect of economic development in the OLS estimations.

Table 8: Freehold land and democratisation - Districts of Bordeaux and Bazas

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Political club	Percentage of vote for Republicans							
		1848 (pres)	1848	1849	1876	1877	1881	1885	1889
Freehold land	0.181**	0.078	0.065*	0.087*	0.119*	0.166**	0.174**	0.116*	0.017
	(0.070)	(0.059)	(0.039)	(0.050)	(0.070)	(0.066)	(0.069)	(0.061)	(0.052)
Distance controls	X								
Land controls	X	X	X	X	X	X	X	X	X
Population and industrial controls		X	X	X	X	X	X	X	X
Observations	229	195	195	195	223	226	228	228	228
R^2	0.076	0.255	0.216	0.199	0.078	0.170	0.238	0.093	0.029

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: The log of percentage of vote for Republicans is reported. All years correspond to a legislative election, except the 1848 (pres) which corresponds to the presidential election of 1848. Freehold land is a binary variable which is equal to one if at least one allod was present in the municipality at stake between the end of the 13th and the 15th century. For the effect on political clubs, distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: ruggedness and wheat suitability. For the effect on the support for Republicans, land controls include: ruggedness, wheat suitability, potato suitability and the surface area of municipalities while population and industrial controls include the population level and the number of industrial factories. The population in 1846 is used as a control for the years 1848 and 1849, population in 1872 for the years 1872, 1873 and 1874, the population in 1876 for the years 1876 and 1877, the population in 1881 for 1881, the population in 1886 for 1885 and the population in 1891 for the year 1889. Robust standard errors are reported.

7 Transmission Channels

The various maps used in this paper show a very persistent geographical correlation between the location of rebellions against feudalism and the Absolute Monarchy, the presence of political clubs, the birthplace of people who resisted the 1851 coup and the nineteenth-century electoral support for democracy. Even after controlling for economic and demographic factors, there is still a high correspondence between these variables. Municipalities which rebelled against state and local authority were for example 36 percentage points more likely to have a political club, 29 percentage points more likely to be the birthplace of a person prosecuted after the 1851 coup, and showed stronger support for the Republicans, with an increase in their share of votes ranging from 11 to 18 percent. The same applies to municipalities that rebelled against feudalism, and for which the magnitude of all these relationships is roughly halved (see Table A49).

It is also remarkable to observe that these political outcomes, which profoundly and enduringly influenced French history, are closely linked to medieval legislation on freehold land and the distribution of freehold property at the municipal level. This distribution, shaped by Roman land ownership rules, significantly impacted French political history from at least the early seventeenth century to the late nineteenth century.

In this section, I explore the transmission channels that can explain the long-lasting impact of freehold land on political outcomes. I will argue that this persistence can be explained by both the inertia in the distribution of landholding inequalities over time and the cultural transmission of democratic values.

7.1 Inertia in the Distribution of Landholding Inequalities

Landholding inequalities are usually found to be quite persistent over time, as it often requires massive redistribution or drastic economic and social changes to significantly affect the structure of land ownership. In the case of France, the strong negative correlation between the concentration of freehold land according to the toponymy and landholding inequalities in the nineteenth century exemplifies this inertia (Figure B27 and Table A11). In these areas, a higher number of people completely owned land from the Late Middle Ages to the Revolution. Although the Revolution abolished feudal privileges, it did not lead to a massive redistribution of land among the population, even in regions with a higher concentration of confiscated and auctioned Catholic Church property (Finley et al., 2021). Areas with lower landholding inequalities in nineteenth-century France were therefore also characterised by a stronger presence of freehold land and a more equal land ownership structure before the Revolution.

Given this information, the negative effect of distance to freehold land can partly be explained by the social control exerted by large landowners and their support for an authoritarian form of government. Literature suggests this support stems either from the fear of land redistribution following democratisation (Boix and Stokes, 2003) or from hierarchical social norms tied to high rural inequalities, which often conflict with democratic values (Ziblatt, 2008). High levels of landholding inequality have also been showed to provide local elites with the means to influence the voting behaviour of the local population and to align it with their own political preferences (Emmenegger et al., 2024). This reinforces their social control over large segments of the population. Conversely, small landowners are more likely to support a representative political system that protects property rights to avoid expropriation by an autocratic elite (Ansell and Samuels, 2010).

These transmission channels can thus explain the lower frequency of rebellions against feudalism, state and local authority in areas where freehold land was scarce. In such areas, the higher social control exerted by large landowners or feudal lords reduced the propensity of people to rebel in defence of their land properties. This also contributed to fewer uprisings against the Absolute Monarchy, its judicial and military power, and the demands for a more equal and representative political system. Since these areas continued to exhibit higher landholding inequalities during the nineteenth century, the same transmission channels would account for the lower electoral support for the Republicans and the slower democratic consolidation of France. The negative impact of landholding inequalities at the department level on the consolidation of democracy in nineteenth-century France supports this hypothesis (Montalbo, 2023).

Consequently, the enduring impact of freehold land ownership partly stems from the persistent distribution of landholding inequalities over time. Those who owned freehold land rebelled against feudalism and the Absolute Monarchy before the Revolution, leading to small landowners supporting democratic consolidation and defending the Republic in nineteenth-century France. Freehold land is therefore a proximal cause to democratic consolidation through lower landholding inequalities.

To delve deeper into this transmission channel, one would ideally assess the concentration of freehold landowners among those who participated in pre-Revolution rebellions and the presence of crofters in municipalities with stronger Republican support during the nineteenth century. Unfortunately, this evaluation can't be conducted directly due to a lack of information on the social composition of the rebels and municipalities. This information is however available for the people prosecuted after the 1851 coup.

Indeed, the data gathered in (Farcy and Fry, 2018) mention 2,430 different professions for 24,716 persons, which corresponds to 92% of the entire number of people prosecuted. I collected this information for the 24,218 persons for whom it is possible to know the profession and the municipality of birth. Around 23% of them was working in the agricultural sector, 46% in the industrial one, 13% had a profession related to trade and 7% had a liberal profession (see Table A50). I am forced to work here with these general categories as it is impossible to evaluate from the professions mentioned if the people working in the agricultural sector were small or large landowners[55].

I therefore created a variable corresponding to the percentage of agricultural workers among the persons prosecuted for each municipality of birth. There was on average 15.6% of farmers among people prosecuted within these municipalities. However, these farmers were born in a very restricted number of places. 73.5% of all birthplaces were characterised by the complete absence of agricultural workers among the prosecuted, and only 13% of the birthplaces produced a majority of farmers among the rebels. Moreover, there is virtually no correlation between the distance to freehold land as measured in the toponymy and the percentage of agricultural workers among the prosecuted (see Figure B39).

These outcomes demonstrate that the stable distribution of landholding inequalities does not fully explain the impact of freehold land on resistance to authoritarianism and democratisation. Individuals who owned freehold land before the Revolution, and small landowners afterward, often defended their property and supported democratic institutions. However, the 1851 coup reveals that the influence of freehold land extended beyond these individuals to other community members. In the nineteenth century, support for democracy also came from people outside the agricultural sector in municipalities where freehold land was prevalent before the Revolution. What, then, explains the extension of the freehold land effect to other community members and its persistence over time? If a proximal cause can't account for the whole effect, part of it has to work in a more structural manner.

[55] 148 professions are mentioned as belonging to the agricultural sector. However, they don't provide detailed information on landownership. For instance, 48 professions simply mention that the person was a farmer (or farmer with an additional activity as cooper or blacksmith for example), without indicating if that person owned land or not.

7.2 Democratic Sociability and the Cultural Transmission of Democratic Values

In pre-Revolution French society, agriculture dominated economic production and employed the majority of the labour force. In this context, it is highly likely that community resistance was largely driven by freehold landowners defending their privilege against feudalism. These individuals also challenged the king's authority over land ownership and political life. Although it is impossible to pinpoint when this resistance began to spread, the spirit of defiance likely extended to other community members. With the gradual diversification of the economy, an increasing number of people working outside the agricultural sector would have also opposed authoritarianism. The strong effect of freehold land on resistance to the king's judicial and military power supports the idea that pre-Revolution rebels were striving for greater political freedom and representation, not just the defence of land ownership.

The hypothesis followed is therefore that the effect of freehold land quickly spread to a large part of local communities. The independence spirit and the democratic values favoured by its presence were then culturally transmitted over time and across generations. This would explain both the strength and persistence of the the freehold land impact on resistance to authoritarianism and democratisation.

This idea is supported by the fact that the location of the 5,500 political clubs during the Revolution was strongly influenced by this type of land ownership. Descriptively speaking, more than 20% of the municipalities with freehold land were characterised by the presence of a club, against 13% for the ones that were not. Table 8 already presented the estimation results for the districts of Bordeaux and Bazas, and their significance is confirmed in Table 9 for the entire country. The distance to freehold land was also significantly associated with the presence of political clubs affiliated to the Jacobin Club in Paris. This affiliation reveals a stronger willingness of societies to stay in close connection to the political events occurring in Paris and to more actively participate in political debates at the national level (Boutier et al., 1992).

Political clubs were vital centres for democratic discussion, political sociability, and socialisation. Their presence indicates a local community's inclination to engage in political debate and promote democratic values. Although there is no information on collective organisation before the Revolution, it is probable that communities with freehold land had a more active tradition of political discussion. This collective behaviour likely influenced the spread and cultural transmission of democratic values over time. This explains why the areas and municipalities that resisted authoritarianism during the Ancien Régime also supported the democratisation of France throughout the nineteenth century. The cultural transmission of political ideas is therefore the second factor that accounts for the enduring effect of freehold land and its persistent impact on political outcomes in France over at least three hundred years.

Table 9: Freehold land and political clubs during the French Revolution

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Political club				Political club affiliated to the Jacobin Club			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0310***	-0.4027***	–	–	-0.0156***	-0.0405**	–	–
	(0.0058)	(0.1496)			(0.0019)	(0.0187)		
ln Distance to current freehold land toponymy	–	–	-0.0188***	-0.6526***	–	–	-0.0053***	-0.0582***
			(0.0046)	(0.1843)			(0.0014)	(0.0194)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	35785	35785	19433	19433	35785	35785
R^2	0.026		0.019		0.015		0.008	
$F-stat$		20.358		21.148		20.358		21.148

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Political club is a binary variable which is equal to one if a political club was present in the municipality at stake between 1789 and 1794. Political club affiliated to the Jacobin Club is also defined as a binary variable at the municipality level. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

8 Conclusion

French democratisation can only be fully understood by considering the long-term process that began with resistance to feudalism and the establishment of the Absolute Monarchy. Political rebellions from the early seventeenth century reveal a geographical pattern that strongly corresponds to electoral support for democracy in the nineteenth century. This stable distribution indicates factors that deeply embedded democratic values in local communities.

Freehold land emerges as one such factor. As an heir to the Roman *Ius Italicum* status, full ownership of land had a significant long-term impact on French political life. It enhanced collective action against authoritarianism in the two centuries preceding the Revolution, increased support for democracy, and helped consolidate the Republic in the nineteenth century. The effect of freehold land on democratic values also permeated large segments of local communities and became a cultural trait transmitted across generations. Therefore, the persistent effect of freehold land is a combination of the direct effect of land ownership and the indirect effect of cultural transmission.

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Appendix for Online Publication

A Historical Background

A.1 Expansion of the Frankish Kingdom

Figure B1: Expansion of the Kingdom of the Franks, 481-843

Source: See main text.

Notes: The animation displays the expansion of the Franks from the beginning of the reign of Clovis I in 481 to the Treaty of Verdun in 843. Click on the figure to activate the animation.

A.2 The Salic Laws and the Freehold Property of Land

This subsection is based on the very precise descriptions of the Salian laws provided in Rivers, 1986 and in Drew, 1991.

A.2.1 The Codification of the Salic Laws

The first codification of the Salic or Salian laws, known as the *Pactus Legis Salicae*, is attributed to Clovis I and was written between 507 and 511[56]. The Roman tradition influenced it, as Clovis almost certainly had advisers trained in the Roman law. The laws were written in Latin, with the addition of what is known as the Malberg glosses and which corresponds to vernacular Frankish terms and phrases which are interpolated within the Latin text and attempt to clarify it. The Pactus was then modified by Childebert I, Chlotar I, and Chilperic I, the sons and grandsons of Clovis. These modifications are called capitularies and correspond to 6 additional chapters. These laws were then corrected and reissued, in what is known as the *Lex Salica Karolina*, some three centuries later by Charlemagne, in 802-3. This forms the basis of what is generally described as the Salian or Salic Laws[57].

The Salic laws mainly deal with private law and topics related to both civil and criminal law, such as marriage, inheritance, land property, false testimony, theft or murder[58]. The laws introduced monetary payments in gold solidi and their equivalent in silver denarii for each illegal act. The first version of the code imposed no penalty other than money compensation (ultimately slavery or outlawry if a freeman was unable to pay) for freemen. Only slaves could be lashed, tortured, castrated or put to death. Some capitularies issued later occasionally introduced physical penalties for freemen[59]. In case of murder, the monetary compensation was called *wergeld* or *leodgeld*, equivalent to "man price".

The *Pactus* includes a list of 65 legal titles or headings, each of them being composed of several points[60]. Its two first headings are for example "Concerning a summons to court" and "Concerning the theft of pigs". The various entries then detail the compensations that should be paid depending on the nature of the crime. They were most often very specific. Twenty

[56]Prior to this codification, the traditions or customs of the people were handed down by word of mouth from generations of the past. Customary laws were kept in the memories of the elders, who when needed could be called together to “speak the law”. The original text of Salian laws has not survived and is now lost. The earliest surviving code issued by a German king was the Code of Euric, written under the rule of the Visigothic king Euric (406-485), around 481. It applied to the Visigoths living in the south of Gaul and Spain.

[57]This should not be mixed up with a more restricted acceptation of the expression "Salic Law", and which refers to the impossibility for a woman to ascend the throne of France. This restriction was progressively imposed from 1316 to 1328 when three kings (one after another) - Louis X in 1316, Philippe V in 1322 and Charles IV in 1328 - died without legitimate male heir. This eventually ended the Capetian dynasty which was replaced by the House of Valois in 1328.

[58]As regards murders, the main aim of the Salic laws was to halt blood feuds between families, which consisted in series of killings and counter-killings between members of two different kindreds. The kindred had an obligation to support its members, which explains why vendettas were considered as obligatory if a member of a kinship was assaulted or murdered.

[59]In the capitularies, the death penalty is for example provided in three cases: if a man marries his father’s wife; if a man commits rape; if a man kills another man without cause.

[60]The capitularis also include several entries. The number of headings was increased to 100 in the *Lex Salica Karolina*.

different entries are for example present in the "Concerning the theft of pigs" heading, reflecting the rural nature of the Frankish world[61]. The same is true for wounds, as a higher compensation should be paid if blood spurted or flowed from the wound. Murders entailed varying compensation levels, depending on the age and the "nationality" of the victim. The wergeld of a Roman landholder was of 100 solidi, against 200 for a Frankish freeman, and only 35 for a slave. This amount was increased to 600 solidi for the murder of a boy below 12 years old, a woman in childbearing years, or if a man killed in his own house. If the body was concealed, the compensation was tripled.

In court, proof was established through either oath-taking (known as compurgation) or ordeal. Compurgation was a judicial method in which both the accuser and the accused swore an oath and reinforced their claims with a group of oath-helpers (or oath-takers), whose number varied based on the severity of the case. These oath-helpers were not witnesses providing sworn testimony but rather individuals affirming their support for the principal's oath, whether for the accuser or the defendant. If any oath-helper hesitated or refused to swear, the oath was considered broken, resulting in the accused being deemed guilty or the accuser losing the case. For each lawsuit, the burden of the proof fell to the defendant.

If evidence conflicted and ordeal by boiling water or by lot was organised. In the former case, the accused would draw out a stone from the bottom of a kettle of boiling water with his bare hand. The hand was then wrapped and, after a few days, the defendant was found innocent if the wound was healing well from the burn. If the hand had festered, he was declared guilty. Not a lot on information was provided on ordeal by a lot, which was primarily used for slaves. A slave drew a straw or twig with a particular marking from a bunch of straws, and was proclaimed guilty or innocent according to what he drew.

A.2.2 Allodial Land and Salic Land in the Salian Laws

The Salian Franks from whom originate the Merovingian and Carolingian dynasties possessed two types of land ownership: *allod* and *terra Salica*. The term allod, is derived from the Old Low Franconian *all od* meaning "full property". The word is a compound of *all* "whole, full" and *od* "estate, property". *Terra salica* is a general term referring to the land owned by the Salians. Both terms therefore describe land that was owned outright, without obligation to a lord or higher authority. Both names appeared when the laws of the Franks started to be codified. The former was inheritable by both men and women, while the latter was limited to male heirs. Frankish kings often granted terra Salica in return for service, with the expectation that it would only be passed down to someone capable of maintaining that duty. It explains why women were excluded from inheriting Salic land.

One heading in the *Pactus Legis Salicae*, and an additional one in the *Lex Salica Karolina* which almost identically reproduces it, describe precisely the inheritance rules surrounding

[61] The level of the monetary compensations depended on whether the theft concerned a piglet, sow or boar, their age, number, and if they were stolen from an enclosure or a locked pigsty. Not a single urban reference is present in the Salian laws.

allodial and Salic land. They introduce a clear equivalence between males and females as regards inheriting allodial property, while Salic land was restricted to males. The first capitulary added to the *Pactus Legis Salicae* explains how disputes over allodial land should be settled. The three headings are reproduces below, using the translation provided in Drew, 1991.

• *Pactus Legis Salicae*

LIX CONCERNING ALLODIAL LANDS (*de alodis*)

1. If a man dies and leaves no children, and if his father or mother survives him, this person shall succeed to the inheritance.
2. If there is no father or mother but he leaves a brother or sister, they shall succeed to the inheritance.
3. If none of these is living, then the sister of the mother shall succeed to the inheritance.
4. If none of the mother's sisters live, then the sisters of the father will succeed to the inheritance.
5. If there is no father's sister, after these kindred whoever is closest who comes from the father's kin shall succeed to the inheritance.
6. But concerning Salic land (terra Salica), no portion or inheritance is for a woman but all the land belongs to members of the male sex who are brothers.

• Capitularies

CAPITULARY I
LXVI
CONCERNING FAMILY PROPERTY HELD IN ALLODIAL TENURE (*de rebus in alode patris*)

If anyone sequesters [i.e., has the land placed in the hand of a third party] another man's property held as allodial land from his father (*patris*), he against whom the case is brought [i.e., he whose land was sequestered] should offer three witnesses [to the fact that] he had it from the allodial property of his own father, and another three witnesses to the means whereby his father had this property. If he does this, he can liberate the property in dispute. If he does not do this, he should present three oathhelpers who will support his claim that he had it from the allodial property of his family. If he does this, he will free himself from penalty in this case. If he does not do this, then he who brought suit (*suo fel troctum* in the Malberg gloss) [shall have it]; and afterwards as the law states he [who was unable to secure witnesses or oathhelpers] shall be liable to pay thirty-five solidi to him who claimed the property.

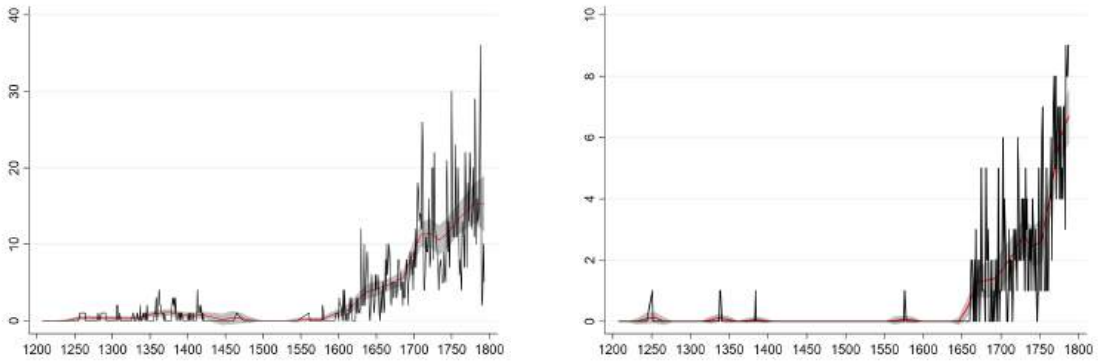
• *Lex Salica Karolina*

XXXIV
CONCERNING LAND HELD BY ALLODIAL TENURE (de alode)

1. If a man dies and leaves no children, if his father or mother survive, they shall succeed to his inheritance.
2. If the father or mother are not living and he leaves brothers or sisters, they shall secure the inheritance.
3. But if none of these is living, the sisters of the father will succeed to the inheritance.
4. If indeed none of the father's sisters lives, his mother's sisters shall claim the inheritance for themselves.
5. If moreover none of these is living, whoever is nearest from the father's kin shall succeed to the inheritance.
6. Indeed concerning Salic land (*terra Salica*), no part of the inheritance may pass to a woman but all the inheritance of land goes to the male sex.

B Data

B.1 Data on Rebellions and Political Outcomes

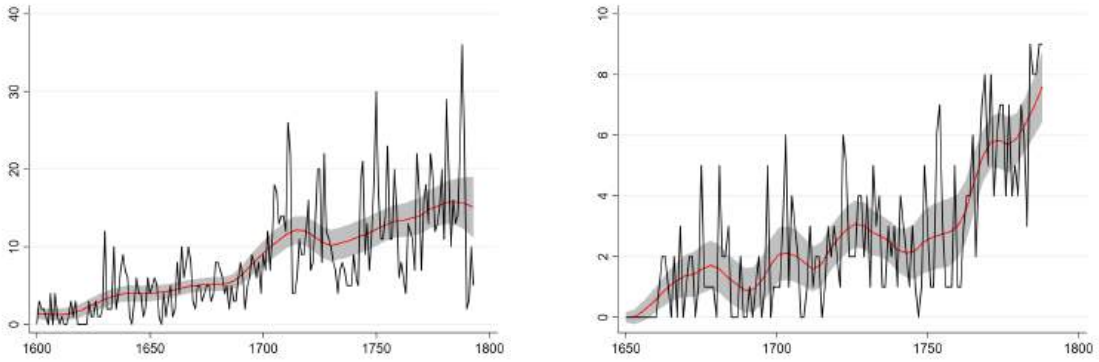


Resistance to state and local authority | Resistance to feudalism

Figure B2: Number of rebellions against state, local authorities and feudalism

Source: See main text.

Notes: Red curves are local polynomial smooth plots, represented with 95% confidence intervals in shaded area. There were 325 rebellions against feudalism in 1789, which are not represented on the graph.



Resistance to state and local authority Resistance to feudalism

Figure B3: Number of rebellions against state, local authorities and feudalism

Source: See main text.

Notes: Red curves are local polynomial smooth plots, represented with 95% confidence intervals in shaded area. There were 325 rebellions against feudalism in 1789, which are not represented on the graph.

Table A1: Typology of the rebellions against feudalism

Original typology	Typology in English	Observations	Percent
Anti-aristocracy	Anti-aristocracy	1	0.25
Peasant revolt against feudal lords	Peasant revolt against feudal lords	3	0.76
Actes d'hostilité à l'égard de la seigneurie et de ses agents	Acts of hostility towards the seigneury and its agents	4	1.02
Opposition aux rénovations de terriers	Opposition to land register updating	41	10.43
Défense des droits collectifs (communaux, droits d'usage...) contre le seigneur	Defence of collective rights (commons, usage rights, etc.) against the feudal lord	150	38.17
Rejet des symboles de l'autorité seigneuriale (armoiries, piloris, banc seigneurial, etc.)	Rejection of symbols of seigneurial authority (coat of arms, pillory, seigneurial bench, etc.)	17	4.33
Opposition au monopole seigneurial de chasse ou de pêche	Opposition to seigneurial hunting and fishing privileges	61	15.52
Opposition à la police seigneuriale en matière de danses, charivaris, fêtes, etc.	Opposition to the seigneurial police regarding dances, carnivals, festivals, etc.	10	2.54
Actes hostiles aux agents de la seigneurie	Hostile acts against agents of the seigneury	29	7.38
Refus de l'intervention seigneuriale dans la gestion municipale	Rejection of seigneurial intervention in municipal ruling	3	0.76
Divers	Miscellaneous	51	12.98
Contestation d'ordre fiscale, honorifique, etc.	Tax disputes, honorary claims, etc.	12	3.05
Action à caractère antiseigneurial	Anti-seigniorial action	11	2.80
Total		393	100.00

Source: See main text.

Notes: The table provides the typology of rebellions against feudalism as reported in the HiSCoD database and their translation in English.

Table A2: Typology of the rebellions against state and local authorities

Original typology	Typology in English	Observations	Percent
Actions dirigées contre l'impôt ou contre la vente d'offices	Actions against taxes or the sale of charges	1	0.06
Against city council	Against city council	3	0.19
Against Count	Against Count	6	0.38
Against royalty	Against royalty	49	3.10
Anti-military, against billeted soldiers	Anti-military, against billeted soldiers	2	0.13
Civil disobedience	Civil disobedience	6	0.38
Colonial rebellion	Colonial rebellion	2	0.13
Communauté contre le pouvoir central	Community against central government	21	1.33
Communauté contre élément extérieur : contre l'autorité de l'évêque	Community against external element: against the authority of the bishop	5	0.32
Communauté contre élément extérieur : contre la justice royale et ses officiers	Community against external element: against the royal justice and its officers	15	0.95
Communauté contre élément extérieur : contre le soldat ou l'agent de l'état	Community against external element: against the soldier or agent of the state	7	0.44
Communauté contre élément extérieur : contre une autorité ancienne : seigneur ou évêque	Community against external element: against an ancient authority: lord or bishop	10	0.63
	lord or bishop		
Heurts entre la population civile et les troupes	Clashes between civilians and troops	13	0.82
Incident provoqué par le décri total d'une monnaie	Incident caused by the total ban on a currency use	2	0.13
Opposition et mouvements insurrectionnel au sein de la communauté	Opposition and insurrection within the community	3	0.19
Opposition et mouvements insurrectionnel au sein de la communauté : factions nobilaires	Opposition and insurrection within the community:	2	0.13
	nobility factions		
Opposition et mouvements insurrectionnel au sein de la communauté : factions notables	Opposition and insurrection within the community:	15	0.95
	notables		
Opposition et mouvements insurrectionnel au sein de la communauté : groupe d'action cimenté par le fanatisme religieux	Opposition and insurrection within the community:	2	0.13
	an action group cemented by religious fanaticism		
Opposition et mouvements insurrectionnel au sein de la communauté : lutte de deux groupes d'action	Opposition and insurrection within the community:	1	0.06
	the struggle of two action groups		
Conflit au sujet de la nomination d'un curé ou d'un vicaire	Dispute over the appointment of a parish priest or vicar	24	1.52
Protestation contre les réformes d'ordre judiciaire, fiscal, financier ou monétaire	Protest against judicial, fiscal, financial or monetary reforms	51	3.22
Affrontement lié à la contrebande du sel et ou du tabac	Confrontation linked to the smuggling of salt and/or tobacco	1	0.06
Résistance à l'appareil judiciaire, militaire ou policier de l'État	Resistance to the state's judicial, military or police apparatus	5	0.32
Opposition à une saisie judiciaire ou à une expulsion	Opposition to a judicial seizure or eviction	140	8.84
Opposition à une opération de désarmement	Opposition to a disarmament operation	13	0.82
Révolte à l'occasion d'un transfert de détenu(s) ou d'une arrestation	Revolt during a transfer of detainee(s) or an arrest	353	22.30
Révolte à l'occasion d'une exécution publique	Revolt at a public execution	32	2.02
Révolte de prison ou d'hôpital, attaque de prison, évasion collective	Prison or hospital revolt, prison attack, mass escape	138	8.72
Opposition au recrutement des soldats de milice et gardes-côtes	Opposition to the recruitment of militia soldiers and coastguards	134	8.46
Opposition à l'enrôlement des recrues	Opposition to the enlistment of recruits	125	7.90
Hostilité aux troupes régulières (garnison, logement, passage)	Hostility to regular troops (garrison, accommodation, passage)	72	4.55
Hostilité à la maréchaussée ou aux formations de police urbaine	Hostility to the maréchaussée or urban police forces	41	2.59
Mutinerie militaire	Military mutiny	39	2.46
Divers	Miscellaneous	70	4.42
Opposition à l'action du personnel des Eaux et Forêts	Opposition to the action by Eaux et Forêts staff	58	3.66
Critique du fonctionnement de l'institution municipale	Criticism of the operation of the municipal institution	12	0.76
Gestion de biens communaux	Management of the commons	19	1.20
Hostilité à l'égard des autorités municipales	Hostility towards municipal authorities	31	1.96
Hostilité à l'égard de la police municipale	Hostility towards municipal police	19	1.20
Émeute contre les gens de guerre (logement)	Riot against soldiers (accommodation)	41	2.59
Total		1583	100.00

Source: See main text.

Notes: The table provides the typology of rebellions against state and local authorities as reported in the HiSCoD database and their translation in English.

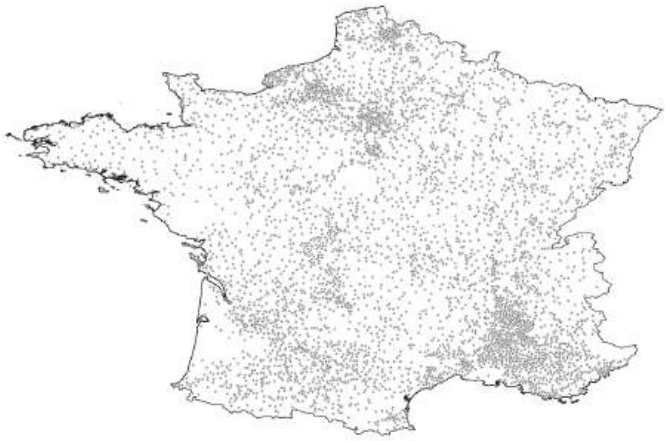


Figure B4: Location of political clubs during the revolutionary period in France (1789-1794)

Source: See main text.

Note: Each dot represents a municipality with at least one political club between 1789 and 1794.

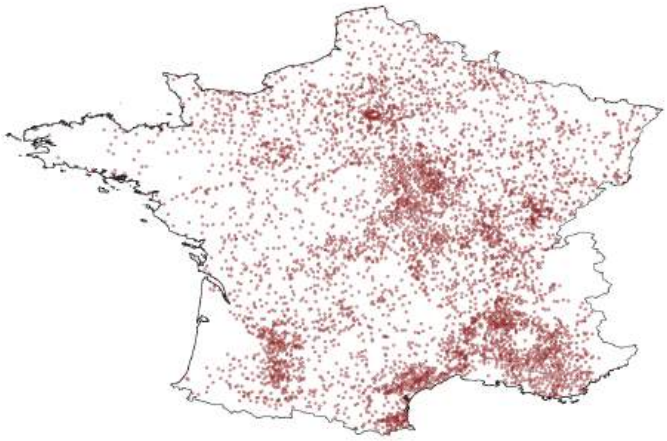


Figure B5: Birthplaces of people prosecuted after the coup d'État of 2 December 1851 by Louis-Napoléon Bonaparte

Source: See main text.

Note: Each dot corresponds to the birthplace of a person prosecuted. The County of Nice and the Savoie and Haute-Savoie departments are excluded from the dataset as they did not belong to France in 1851.

Table A3: Republican groups during the elections of the Second Republic and Third Republic

Election year	Republican groups
1848 and 1849	Democrat-Socialists; Moderate Republicans
1876	Radicals; Republicans; Constitutional Republicans; Centre and Centre-Left
1881	Socialist Labour; Radicals; Republicans; Republican Union; Centre and Centre-Left; Various Left-Wing
1885	Socialists; Radical-Socialists; Radicals; Radical-Republicans; Republicans; Independent Republicans; Moderate (Opportunist) Republicans
1889	Socialists; Radical-Socialists; Radicals; Radical-Republicans; Republicans; Various Radicals; Moderate (Opportunist) Republicans; Various Republicans; Various Radicals

Source: See main text.

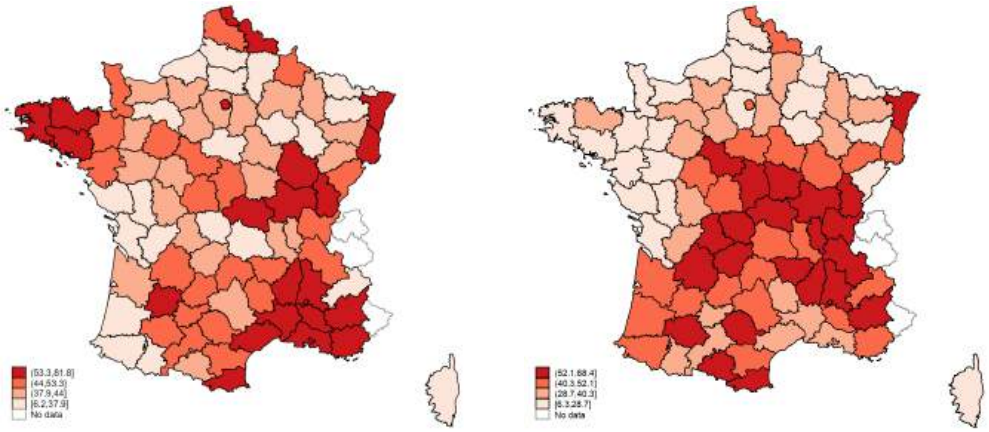
Notes: The political groups and coalitions are identified by (Cagé and Piketty, 2023) thanks to the national and local newspapers which reported detailed information on each candidate.

Table A4: Summary Statistics - Representatives in the Lower House of Parliament

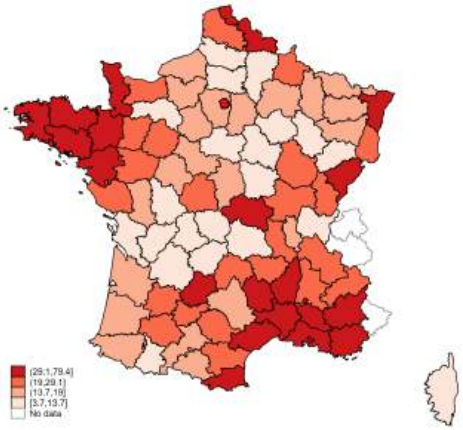
Election Year	Republican Representatives	Monarchist and Bonapartist Representatives
1849	255	450
1876	393	208
1877	323	208
1881	457	88
1885	303	201
1889	366	210
1893	480	75

Source: See main text.

Notes: The total number of representatives is reported for mainland France and the oversea territories.



1848 1849



1848 - Presidential

Figure B6: Republicans share of vote during the Second Republic

Source: See main text.
Notes: The two top maps correspond to legislative elections, while the last one refers to the 1848 presidential election.

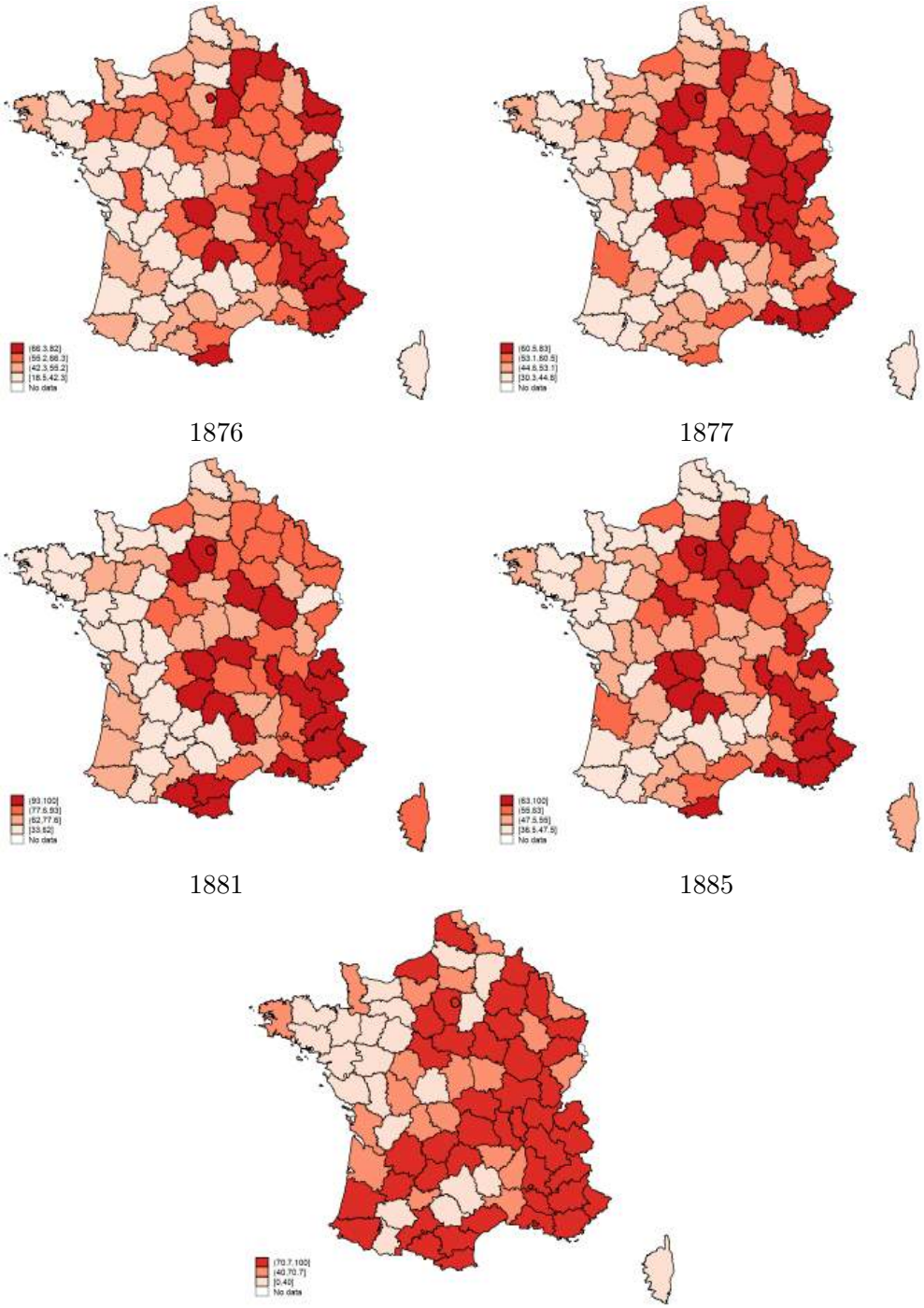


Figure B7: Republicans share of vote in the early Third Republic

Source: See main text.

Notes: Each year corresponds to a legislative election.

B.2 Freehold Land and Toponymy

B.2.1 The Legislation on Freehold Land

Figure B8: Freehold and non-freehold land according to the French *Coutumes*

Source: See main text.
Note: This map is the original one provided in (Hesse, 1979).

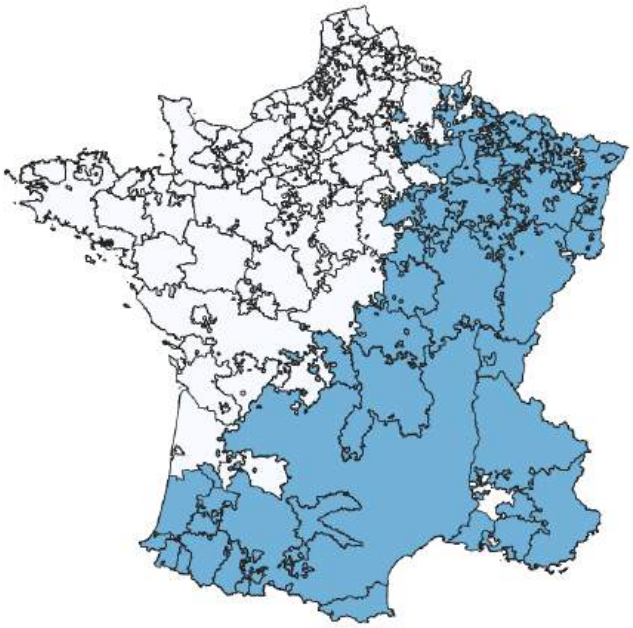


Figure B9: Freehold (blue) and non-freehold (white) land according to the French *Coutumes*

Source: (Hesse, 1979) and (Gay et al., 2024a).

Note: There is no data for Corsica on the legislation about freehold land. "No freehold land" indicates that the customary practices were not conducive to the free ownership of land, requiring commoners to furnish legal documentation to establish their land ownership rights. Conversely, in provinces within the "Freehold land" region, feudal lords were obliged to substantiate their land ownership, thereby promoting freehold ownership among commoners.

B.2.2 Toponymy and its Application to the Case of France

Toponymy (also called toponymics or toponomastics) is the study of proper names of places (toponyms), focusing on their origins, meanings, classifications, and usage. It is a branch of onomastics, the study of proper names of all kinds. Toponyms mostly refer to the physical geography of locations (usually the relief, rivers, forests and fields), patterns of settlements, successive occupancies, shifts in ethnicity and politics, nationalistic sentiments, human activities, and the processes of cultural diffusion (Savage, 2009)[62]. A commonly used strategy in toponymic research is to classify toponyms as macro-toponyms referring to the names of large geographical sites as countries, region, capitals, ... and micro-toponyms referring to smaller places such as wells, gates, local streets, fields, brooks, ...

A distinction is often made between two approaches of toponymy. The first one looks at place names over a long period of time and tries to understand who named the place, what language was used, when it was named, and what is the meaning of the place name and of its transformations (Tent, 2015). This approach is called historical toponomastics or diachronic toponymy. This first approach is therefore closely related to etymology, the study of the origins of words and their meanings, and can be defined as an archaeology of place names. The second approach, called synchronic toponymy, rather focuses on the study of place names within a specific moment of time, trying to unearth common patterns in the geographical distribution of place names or of a group of them.

The use and evolution of toponyms reflect local communities' desire to distinguish a specific feature of a location from nearby ones. As such, they are valuable assets for understanding the current and historical characteristics of places. Indeed, even after changes in population, toponyms frequently preserve some aspects of their original forms in their morphology. They are most of the times not completely removed or replaced, even after linguistic changes. Toponyms can therefore be considered as "linguistic fossils", providing information on past and/or persistent characteristics of people and places (Cacciafoco and Cavallaro, 2023). Assessing the origins of toponyms is of course more complicated when they were influenced by ancient languages. The influence of pre-Indo-European or pre-Celtic civilisations on French toponyms can for example only be assessed thanks to the identification of roots deriving from ancient languages. The influence of Latin or of Germanic languages after the fall of the Western Roman Empire is often easier to identify as toponyms remained more similar to the original Latin or German words from which they originate.

Toponyms in France have been strongly influenced by agricultural resources and activities. The nature of the soil, its colour or value, the types of plants cultivated or the shape of fields had foe example an influence on toponyms (Dauzat, 1947; Nègre, 1990; Rostaing, 1992; Cacciafoco and Cavallaro, 2023). For example, place names like Argelliers, Argilliers or Argillière refer to

[62]Toponymy can be divided into several sub-fields depending on the type of place name studied. For example, hydronymy refers to the study of the names of all kinds of water bodies, while oronymy refers to the study of the names of mountains, hills and hillocks.

the historical presence of *argile* soil (clay). In the Brittany region, the cultivation of rye (*seigle* in French and *segal* Breton) led to the creation of place names such as Botségal or Parcou-Ségal. The cultivation of hemp (*chanvre* in French and *kouarh* in Breton), was also associated with several toponyms, such as Bot Couarch or Kerangouarc'h for example (Plonéis, 1989).

The same is true when considering the rules and characteristics of land ownership. For example, many place names in France derive directly from a Roman landowner. Municipalities named Albigny, Arbigny or Aubigné for example stem from *Albiniacum*, which refers to a landowner named *Albinius*. It is therefore logical to find that freehold land also left a deep mark on French toponyms, and to find a long list of place names referring to the historical presence freehold land (Balon, 1954).

Toponymic studies of France usually distinguish between five main periods to analyse the determinants of toponyms (Dauzat, 1947; Nègre, 1990; Rostaing, 1992):

I. The formation of toponyms from the influence of pre-Celtic civilisations (pre-3rd century BC).

They are best preserved in hydronyms, as many rivers and streams have retained names that predate the arrival of the Gauls. Numerous linguistic roots can be identified, among which:

- Within this category, the pre-Indo-European root *kar* or *kal* related to the word "stone" constitutes one of the oldest and most persistent root of toponyms. It influenced several place names in France, such as Arles, Carcassonne, Challes, Quéribus, Carros.
- *Ab*, *alb* and *alis*, related to water, which have respectively given rise to names like the Avance river, Albe, and Aliso. However, transformations can be significant, as seen in several rivers named Auze in France or Aurance, both derived from *alis*.
- Similarly, the *ar*, *car*, and *dora* roots appear in river names like Dore, Durance, Doire, Doron, Dordogne, and Drôme.
- The numerous Naives and Naves in France that trace back to a pre-Celtic root meaning "valley."
- Agriculture has also left its mark, with the root *artiga*, meaning "cleared land," found in many place names like Artigues, and its variants such as Artige(s), Artigat, and Artix.

II. The Gallic civilisation.

The Gaulish influence is usually easier to identify, as toponyms transformed less compared to the ones deriving from pre-Celtic roots. Common roots include:

- *Briva*, meaning "bridge," appears in names like Chabris (**Caro-briva**, bridge over the Cher river) and Salbris (*Salera-briva*, bridge over the Sauldre river). Other related names include Brives and Brèves.
- Many municipalities in France include *Dun* in their names, deriving from dunon which means "hill" or "fortress". Examples include: Anglure-sous-Dun, Le Bourg-Dun, La Chapelle-sous-Dun, La Chapelle-sur-Dun, Chassigny-sous-Dun, Fontaine-le-Dun, Neuilly-en-Dun, Liny-devant-Dun, Villers-devant-Dun, Lion-devant-Dun, Mussy-sous-Dun, Varennes-sous-Dun, Issoudun, and Verdun. *Lugdunum* also comes from this root.
- *Nanto*, meaning "valley," has also given rise to numerous place names, including Nant, Ternant or Nan-sous-Thil.
- Among hydronyms and toponyms derived from Gaulish terms related to water, we find names originating from *condate*, meaning "confluence," such as Condate, the many places named Condat, as well as Condé and its compounds.

III. The influence of Latin after the Gallic Wars waged by Julius Caesar between 58-50 BC.

The Roman influence on French toponyms is strong, and numerous place names derive directly from Latin words.

- The root *aqua* for water has influenced the creation of several municipality names such as Aigues or Aix and its numerous compounds. In the same spirit, *fontana* for fountain" has led to the creation of several Fontenay in France.
- *Campania*, meaning "large plain", has led to the creation of the word champagne. Many municipalities include this word or a modification of it in their name. Champagne is also the name of a historical and cultural region of France, located at the border with Belgium.
- *Cassano* for "Oak tree" has also influenced many municipalities' name, such as Cassagnes, Cassaigne or Chassagne.

IV. The contribution of Germanic languages after the Migration Period (the Barbarian Invasions of the Roman Empire) from AD 300 to 600.

There was also a Germanic influence following the Great Invasions (Musset, 1994). For example:

- The suffix *-ing* originally referred to the people associated with the person who gave their name to the estate. This evolved into *-inge* or *-ange* depending on the region, as seen in names like Azoudanges (from Ansold), Tressange (from Tresso), and Puttelange (from Putilo).

- The word *fara*, meaning "family," appears in place names such as La Fare, Lafarre, and La Fère. These terms were often combined with Latin elements, forming Germano-Roman toponyms.
- The Vulgar Latin *curtis*, which originally meant "farmyard" and later "farm" or "village," was combined with Germanic personal names to create town names. Examples include Betto, which led to Bethoncourt, Betoncourt, Bettancourt, and Bettencourt, or Baldrich, which gave rise to Baudricourt and Beaudricourt.

V. The formation of toponyms during the Middle Ages and the feudal period.

Many place names from the feudal era have a topographic significance, relating to vegetation, types of dwellings, social structures, or human activities. For example:

- Countless toponyms from this period derive from *castellum* (castle), which is one of the most striking characteristics of feudal place-name formation.
- *Mons* and *podium* were frequently used to describe villages located on heights, leading to names like Montfort, Montaigu, Montbéliard, and Montalembert, as well as Puilaurens, Puimichel, and Le Puy.
- The Latin *fabrica*, meaning "workshop" or "forge," gave rise to names such as Fabrègues, Faverges, Fervaches, and Fervaques.
- Many toponyms from this period also have religious origins. For instance, *cella*, which originally meant "storeroom" and later "hermitage" or "sanctuary," led to the numerous places called La Celle in France. Additionally, many towns are named after saints (Saint- or Sainte-). Other religiously inspired names come from *basilica* (meaning "church"), as seen in Bazoches, Bazoge, Bazailles, Bazeilles, and Bazouches. The word *monasterium* (monastery) led to names like Moutiers, Moustiers, Monastire, and Monestier.

This typology is of course incomplete, as some regions of France were influenced by other languages sometimes associated with foreign invasions. It is for example the case in the Normandy region where Vikings settled from the early tenth century, contributing to the creation of the Duchy of Normandy from 911. The Old Norse mostly influenced place names there, and not in the other parts of the country. The Norse word *bekkr* (brook) for example progressively transformed into the suffix -bec to influence the name of several Norman municipalities as Bolbec, Bricquebec or Caudebec-en-Caux.

There were also numerous modifications to place names after the feudal era and the Middle Ages. For example, around 1,200 municipalities changed their names during the French

Revolution, although almost all of them later reverted to their pre-revolutionary names[63]. The major difference after this period is that toponymy became largely fixed, with most subsequent name changes being orthographic rather than substantive. One exception to this rule is street names, which have remained more susceptible to change over time. Subsection B.2.4 provides examples of orthographic changes for toponyms referring to freehold land.

[63]This renaming was driven by revolutionary authorities, who sought to remove references to religion—such as names beginning with *Saint* or *Sainte*—as well as names linked to feudalism and symbols of the Ancien Régime. As a result, terms like *Saint/Sainte, Roy/Roi/Reine, Château/Castel, Évêque, Lys, Abbaye/Église/Chapelle, Moine, Abbé/Abbesse, Notre-Dame, Comte/Sire/Duc*, and *Dauphin* were eliminated from France's official list of municipalities. Some names were changed as a form of retaliation—for instance, the city of Lyon was renamed Commune-Affranchie ("Freed-City"), while Marseille was briefly called Ville-sans-Nom ("City-without-a-Name"). However, very few of these changes survived the Revolution, and today, only 86 municipalities have retained their revolutionary-era names.

B.2.3 The Toponymic Dictionaries

Sources Used in the Historical Dictionaries

The sources used in the toponymic dictionaries are numerous and very diverse. Let's focus on the dictionary of the Marne department as an example, whose reference is:

A. Longnon, *Dictionnaire topographique du département de la Marne comprenant les noms de lieu anciens et modernes*, Paris : Imprimerie nationale, 1891.

The list of all the sources used in the dictionary is available here: https://gallica.bnf.fr/ark:/12148/bpt6k39298v/f87.item

This dictionary uses three main types of references:

- Printed sources. These sources are extremely diverse. They are composed of history books, local land registers, scientific studies, historical atlases, customary laws, ...
- Manuscripts. These manuscripts are mostly composed of cartularies, minute-books from notaries and land registers from various institutions, especially parishes, abbeys and seigneuries. A cartulary is a medieval manuscript that contains transcriptions of original documents detailing the foundation, privileges, and legal rights of religious institutions, municipal bodies, trade guilds, educational establishments, or families.
- National and local archives. The series used are mentioned, but the exact boxes or documents are not specified.

Altogether, around 250 documents are mentioned in the list of sources, among which 115 manuscripts and 135 printed sources. The exact number of documents from the archives is not mentioned but should be added to these figures.

Table A5: Departments in the dataset and their dictionary publication year

Department number	Department name	Dictionary publication year
01	Ain	1911
02	Aisne	1871
05	Hautes-Alpes	1884
07	Ardèche	1979
10	Aube	1874
11	Aude	1912
14	Calvados	1883
15	Cantal	1897
18	Cher	1926
21	Côte-d'Or	1924
23	Creuse	post-1950
24	Dordogne	1873
26	Drôme	1891
27	Eure	1877
28	Eure-et-Loir	1861
30	Gard	1868
34	Hérault	1865
36	Indre	1889
42	Loire	1946
43	Haute-Loire	1907
44	Loire-Atlantique	1906
51	Marne	1891
52	Haute-Marne	1903
54	Meurthe	1862
55	Meuse	1872
56	Morbihan	1870
57	Moselle	1874
58	Nièvre	1865
60	Oise	1982
62	Pas-de-Calais	1907
64	Pyrénées-Atlantiques	1863
68	Haut-Rhin	1868
71	Saône-et-Loire	2008
72	Sarthe	1950
76	Seine-Maritime	1982
77	Seine-et-Marne	1954
79	Deux-Sèvres	1902
80	Somme	1867
86	Vienne	1881
88	Vosges	1941
89	Yonne	1862

Source: See main text.

Notes: The publication year corresponds to the first edition. For the Creuse department, the dictionary was not published, but kept in the local archives. The publication date is therefore approximative in this case.

Table A6: Years of first appearance or modification of toponyms

Years	Number of Toponyms	Percent	Cumulative Percent
<500	164	0.03	0.03
500-600	196	0.04	0.07
600-700	614	0.11	0.18
700-800	954	0.18	0.36
800-900	3,658	0.68	1.04
900-1000	4,896	0.91	1.95
1000-1100	6,075	1.1	3.05
1100-1200	32,047	6	9.05
1200-1300	70,079	13.1	22.15
1300-1400	61,179	11.4	33.55
1400-1500	67,686	12.6	46.15
1500-1600	71,749	13.4	59.55
1600-1700	72,289	13.5	73.05
1700-1800	79,725	14.9	87.95
1800-1900	35,789	6.7	94.65
1900-2000	29,145	5.4	100.05
Total	536,049	100.00	

Source: See main text.

Notes: The dates correspond to the centuries when toponyms were the first spotted in the historical dictionaries, or when a modification was made to an existing toponym.

Table A7: Types of historical toponyms

Type of toponyms	Percent	Cumulative Percent
Hamlet, village, house, street	45.63	45.63
Farm, field	20.07	65.7
Parish, municipality	14.2	79.9
Stream, river	7.99	87.89
Relief, mountain	4.23	92.12
Castle and related building	3.38	95.5
Wood	2.61	98.11
Religious building	1.99	100.00
Total	100.00	

Source: See main text.

Notes: The percentages are computed over 6,970 historical toponyms related to freehold land.

Table A8: Types of current toponyms

Type of Toponyms	Percent	Cumulative Percent
Hamlet, village, inhabited place	67.35	67.35
Relief, mountain	7.14	74.49
Stream, river, pond	5.92	80.41
Municipality's name	4.60	85.01
Wood	4.24	89.25
Religious building	3.63	92.88
Castle and related building	1.06	93.94
Others	6.06	100.00
Total	100.00	

Source: See main text.

Notes: The percentages are computed over 3,563 current toponyms related to freehold land.

B.2.4 Examples of Toponyms Associated With Freehold Land

• Toponyms associated with allodial land

⁕ Municipality of ***Verneuil*** (Marne department)

Location: https://www.google.fr/maps/place/51700+Verneuil/@48.2338998,-0.198636,6.63z/data=!4m6!3m5!1s0x47e91c7905cbe409:0xec7918181c5ff548!8m2!3d49.1041219!4d3.671497!16s%2Fm%2F03qdbr8?entry=ttu&g_ep=EgoyMDI1MDIxMi4wIKXMDSoASAFQAw%3D%3D

From: A. Longnon, *Dictionnaire topographique du département de la Marne comprenant les noms de lieu anciens et modernes*, Paris : Imprimerie nationale, 1891.

https://gallica.bnf.fr/ark:/12148/bpt6k39298v/f326.image

La rue de l'Aluef, 1393 (arch. nat., P 180, 123)
En la ville de Verneuil, en la rue de l'Aluef, 1508 (arch. nat., P 180, 146)
La Leue, 1508 (arch. nat., P 161, 313)

From the Marne department dictionary, allodial land is identified in the municipality of Verneuil thanks to the term "Aluef". It appears in the name of a street, the "street of the Aluef" (*La rue de l'Aluef*), which was first recorded in 1393. This information is obtained from the P series in the National Archives (number 123)[64]. The street name is again recorded in 1508, alongside another name referring to freehold land, "La Leue", which refer to the same street.

This street name disappeared and is not present in the municipality today. Verneuil is therefore not counted as a freehold land municipality using the current toponymic dictionary (CDIP, 2006), but only the historical one (CTHS, 2020). It is difficult to know when this street name changed or to identify to which current street corresponds to *La rue de l'Aluef* since no map of what was then a parish was made in the 16th century. However, it is clear that the freehold property of land existed in Verneuil, as a street name referring to freehold land survived at least one hundred years there.

⁕ Municipality of ***Thorigné*** (Deux-Sèvres department)[65]

Location: https://www.google.fr/maps/place/79370+Aigondign%C3%A9/@45.8683222,-1.6007777,5.79z/data=!4m6!3m5!1s0x4807497cd8df1d4b:0x879addf7fcbbf67!8m2!3d46.2943282!4d-0.2876588!16s%2Fg%2F11c74ynlxb?entry=ttu&g_ep=EgoyMDI1MDIxMi4wIKXMDSoASAFQAw%3D%3D

[64] The P series corresponds to the archives of The Paris Court of Accounts (or Auditors). This sovereign court established in 1319 managed public expenditures, supervised finances, safeguarded crown estates, audited the accounts of royal officials, and ruled on related legal matters.

[65] Thorigné was merged with several municipalities in 2017 and 2019. The new municipality resulting from this process is named Aigondigné, which is the one reported in the Google Maps link.

From: B. Ledain, *Dictionnaire topographique du département des Deux-Sèvres comprenant les noms de lieux anciens et modernes.* Poitiers: Société français d'imprimerie et de librairie, 1902.

https://gallica.bnf.fr/ark:/12148/bpt6k110100q/f44.image

Alodus de Torgnié, 1110 (cart. St-Maix. 263)
La Leu, 1539 (not. St-Maix.)
Laleu, 1596 (arch. V. E. 3, 40)
Laleuf, (Cass.)

From the Deux-Sèvres department dictionary, allodial land is identified in the municipality of Thorigné thanks to terms "Alodus", "Laleu" and "Laleuf". Alodus first appeared in the cartulary of the Saint-Maixent-l'École abbatial church in 1110. It refers to a farm (as reported in CTHS, 2020), present in the place named Torgnié (an old version of Thorigné) which was owned outright and therefore described as an "alodus". The farm's name changed over time, as it is reported as La Leu in the notarial archives of Saint-Maixent-l'École in 1539, and Laleu in the archives of the Deux-Sèvres department in 1596.

The toponym referring to freehold land is deeply-rooted in Thorigné, as it then appears as Laleuf in the Cassini map (Cass.). This map represents the first set of topographic maps of the Kingdom of France. It was created in the 18th century by several members of the Cassini family, primarily César-François (Cassini III) and his son Jean-Dominique (Cassini IV). Four generations of the Cassini family worked successively to complete this project. Figure B10 depicts the parish of Thorigné as it appears on the Cassini map. The Laleuf toponym is indeed present in the north-western part of the parish. The drawing of house below the name Laleuf refers to an isolated farm or dwelling.

Thorigné is also identified as a municipality with freehold land using the current toponymic dictionary. Indeed, as shown in Figure B11, the toponym associated with freehold land survived until today under the spelling of Lalleu, which is described as an inhabited part of Thorigné in CDIP, 2006.

Figure B10: Thorigné - Cassini map

Source: National Geographical Institute.

Figure B11: Thorigné - Current map from the National Geographical Institute

Source: National Geographical Institute.

⁎ Municipality of ***Nohant-Vic*** (Indre department)

Location: https://www.google.fr/maps/place/36400+Nohant-Vic/@46.5433471,-0.8031801,6.5z/data=!4m6!3m5!1s0x47fa4d4218625069:0x82f0dbd77719183c!8m2!3d46.6393757!4d1.956329!16zL20vMDN3cDU4?entry=ttu&g_ep=EgoyMDI1MDIxMi4wIKXMDSoASAFQAw%3D%3D

From: E. Hubert, *Dictionnaire historique, géographique et statistique de l'Indre*, Châteauroux-Paris, 1889. See page 99.

https://books.google.fr/books?id=kNZiGr-f3B0C&printsec=frontcover#v=onepage&q&f=false

The year in which a given toponym appeared in the archives is provided for around 44% of all the toponyms. For the municipality of Nohant-Vic for example, the term "Laleuf" is specified without any date. As shown in Figure B12, it appears on the Cassini map (western part of Nohant), which means that the toponym emerged before or during the 18th century. The land register of 1841 (which originates from the Napoleonic cadastre launched in 1807) represented in Figure B13 confirms the present of the toponym. It appears twice on the register with the spelling Laloeuf. It first refers to a locality within Nohant when written in bold characters, and to the parcel 330 when written in italic letters. The toponym referring to freehold land seems therefore to have been associated both with a locality or hamlet and a plot of land. As shown in Figure B14, the toponyms still exists today, and Nohant-Vic is therefore considered as a freehold land municipality when using the current toponymic dictionary too.

Figure B12: Nohant-Vic - Cassini map

Source: National Geographical Institute.

Figure B13: Nohant-Vic - 1841 cadastre

Source: Archives départementales de l'Indre (3 P 143/22).

Figure B14: Nohant-Vic - Current map from the National Geographical Institute

Source: National Geographical Institute.

- **Toponyms associated with Salic land**

⁜ Municipality of ***Castanet-le-Haut*** (Hérault department)

Location: https://www.google.fr/maps/place/34610+Castanet-le-Haut/@46.6279393,0.2114018,6.21z/data=!4m6!3m5!1s0x12b185d346a67a17:0xd75cd0da7ecc080d!8m2!3d43.667828!4d2.972913!16s%2Fm%2F027v8jv?entry=ttu&g_ep=EgoyMDI1MDIxMi4wIKXMDSoASAFQAw%3D%3D

From: E. Thomas, *Dictionnaire topographique du département de l'Hérault : comprenant les noms de lieu anciens et modernes*, Paris : Imprimerie nationale, 1865.

https://gallica.bnf.fr/ark:/12148/bpt6k110096s/f233.image

The toponym "La Salesse" is reported as referring to a farm present within the municipality of Castanet-le-Haut (CTHS, 2020), but no date is specified. It does not appear on the Cassini map or the Napoleonic cadastre. It however appears as the name of a hamlet and of a pathway on the current map of Castanet-le-Haut in Figure B15 (top left part of the map). The municipality is therefore also characterised by the presence of freehold land according to the current toponymy.

Figure B15: Castanet-le-Haut - Current map from the National Geographical Institute

Source: National Geographical Institute.

⁎ Municipality of ***Luché-Pringé*** (Sarthe department)

Location: https://www.google.fr/maps/place/72800+Luch%C3%A9-Pring%C3%A9/@47.3658727,-2.7533263,6.29z/data=!4m6!3m5!1s0x47e2a160d24d684f:0x9fe65992f1a6230a!8m2!3d47.70406!4d0.075918!16s%2Fm%2F03qk_fh?entry=ttu&g_ep=EgoyMDI1MDIxMi4wIKXMDSoASAFQA3D%3D

From: E. Vallée, *Dictionnaire topographique du département de la Sarthe : comprenant les noms de lieu anciens et modernes*, Paris : Imprimerie nationale, 1950.

https://gallica.bnf.fr/ark:/12148/bpt6k32056458/f177.image

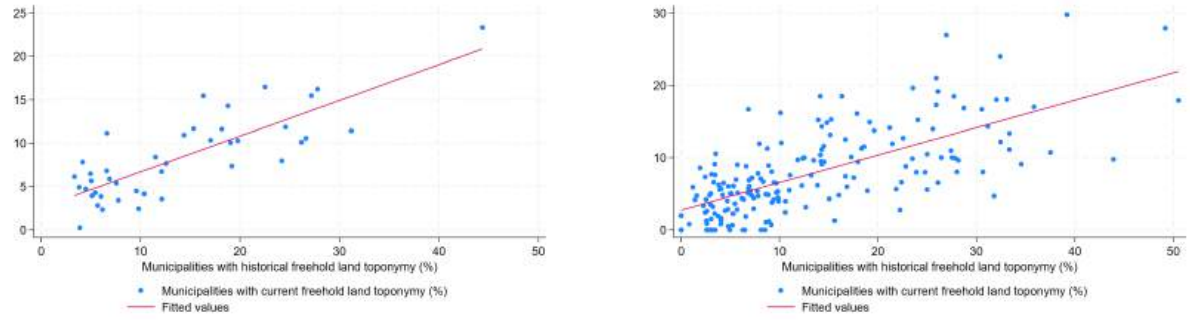
La Mansellerie, 1685 (Arch. dép., H 265)

In the historical toponymic dictionary, the toponym "La Mansellerie" is identified as present in the municipality of Luché-Pringé. It first appeared in 1685 in the local archives of the Sarthe department. This toponym refers to a type of small farm called a *closerie*. The toponym still exists today under the spelling "Mancellerie", as one can see on the bottom right part of Figure B16. The municipality is therefore also characterised by the presence of freehold land according to the current toponymy.

Figure B16: Luché-Pringé - Current map from the National Geographical Institute

Source: National Geographical Institute.

B.2.5 Comparison Between the Dictionaries



Department level District level

Figure B17: Percentage of municipalities with historical and current freehold land toponymy within departments and districts

Source: *Dictionnaire topographique de la France* (2020) and *Dictionnaire des toponymes de France* (2006).

Notes: The districts correspond to the French *arrondissements*.

Table A9: Historical and current freehold land toponymy

	(1)	(2)	(3)	(4)
	Current freehold land toponymy			
Historical freehold land toponymy	0.250***	0.242***	0.244***	0.243***
	(0.010)	(0.018)	(0.018)	(0.013)
Region fixed effects		X		
Department fixed effects			X	
District fixed effects				X
Number of clusters		20	80	286
Observations	19909	19909	19909	19909
R^2	0.093	0.102	0.117	0.135

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Historical freehold land toponymy is a binary variable which is equal to one if the municipality has an historical toponymy corresponding to freehold land. Current freehold land toponymy is the equivalent with current toponymy. Standard errors are clustered at the same geographical level than the fixed effects introduced. The districts correspond to the French *arrondissements*. The region considered as the ones which existed prior to the new regional division of January 1st, 2016. The Brittany region is not included in the estimations.

B.3 Control Variables and Summary Statistics

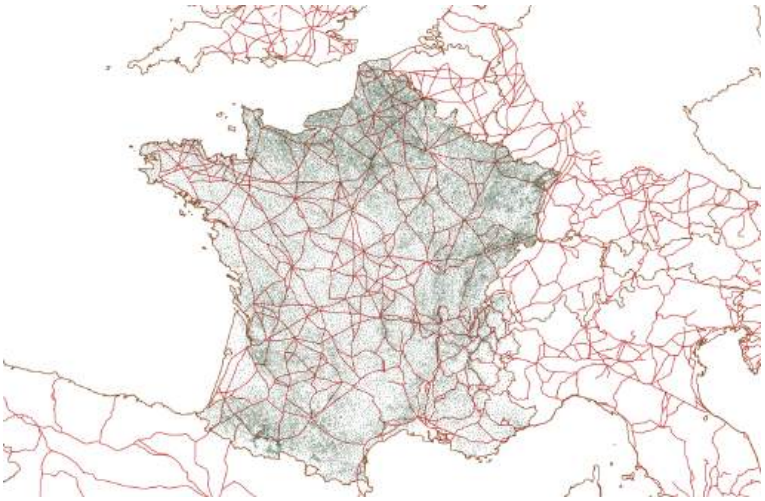


Figure B18: Roman roads and municipality centroid

Source: See main text.

Note: Roman roads are represented in red and the centroids of municipalities in green. White areas within the boundaries of France, as the Alps or Brittany for example, therefore correspond to large municipalities.

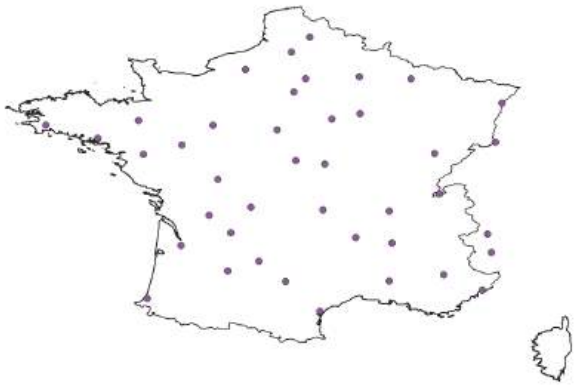


Figure B19: Location of Bishoprics and Archbishoprics in 1450

Source: See main text.
Note: The points represent the centroid of municipalities where bishoprics and archbishoprics were implanted in 1450 in France.

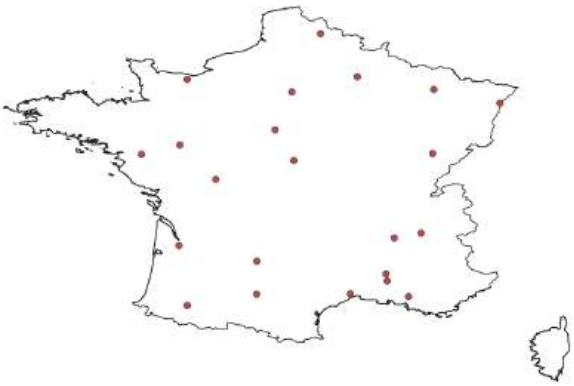


Figure B20: Location of Universities in 1600

Source: (Buisson, 1911).
Note: The points represent the centroid of municipalities where universities were implanted in 1600 in France.

Figure B21: Location of Dominican monasteries in 1500

Source: See main text.
Note: The points represent the centroid of municipalities where Dominican monasteries were implanted in 1500 in France.

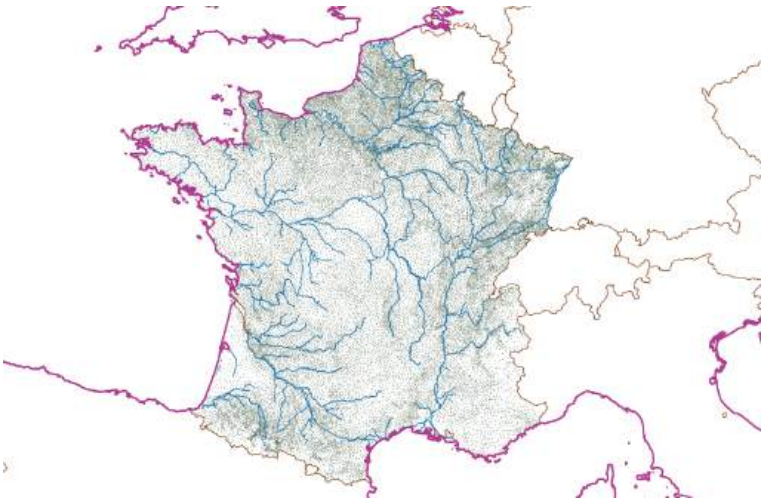


Figure B22: Municipality centroid, waterways and coastline

Source: See main text.

Note: The centroids of municipalities are in green, the waterways in blue and the coastline in purple.

The terrestrial areas of the world are divided into identical 30 arc seconds (1x1 km) squares for which elevation is computed. Then, the terrain ruggedness index corresponds to the absolute elevation change between each grid-square and all contiguous grid-squares, computed follow the method developed in (Riley et al., 1999). More formally, let $X_{r,c}$ be the elevation for a square located in row r and column c in the grid of elevation squares. The terrain ruggedness index for this square is:

$$[\sum_{i-1}^{i+1}\sum_{j-1}^{j+1}(X_{i,j} - X_{r,c})^2]^{\frac{1}{2}}$$

More concretely, the ruggedness of any given $1km^2$ area is determined by measuring how the elevation of that area differs from all those of neighbouring $1km^2$ areas. These differences are then squared so that positive and negative elevation changes contribute equally to the ruggedness measure. The sum of these differences is then normalized by taking the square root. Finally, the ruggedness index for all departments correspond to the average ruggedness computed over all grid cells in the department. The unit for the index is therefore meters of elevation difference for the 30 arc seconds grid-squares.

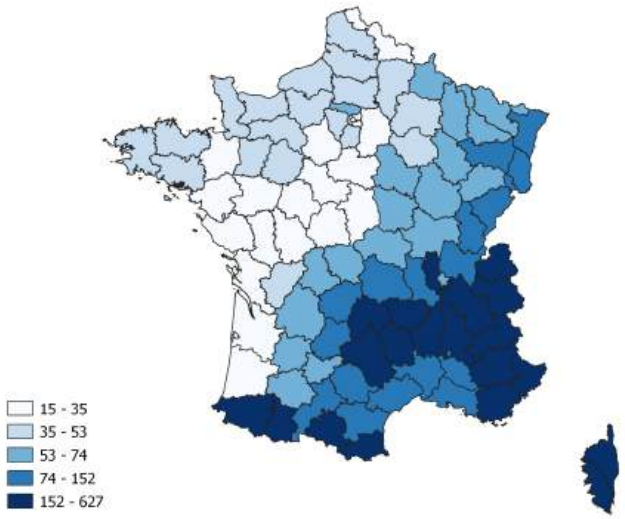


Figure B23: Average terrain ruggedness within departments

Source: (LPDAAC, 2004).

Note: The unit for the ruggedness index is the average meters of elevation difference for the 30 arc seconds grid-squares within each department.

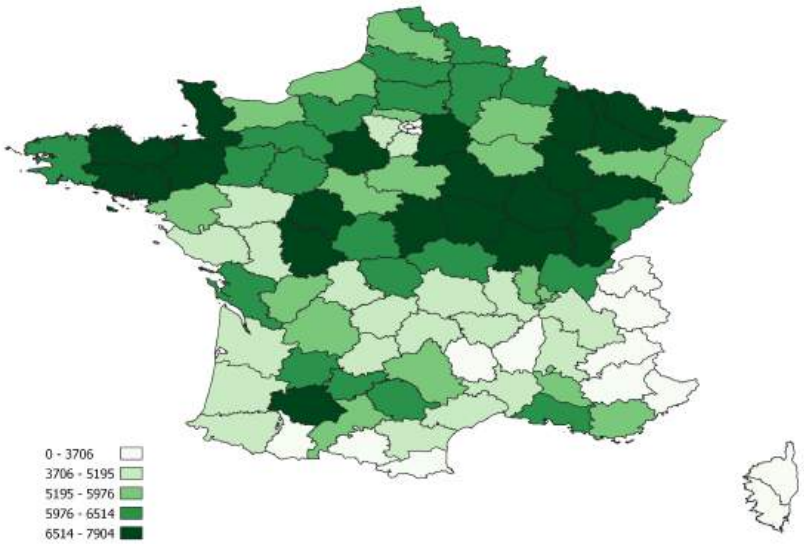


Figure B24: Wheat suitability index within departments

Source: See main text.

Note: The index is computed using rain-fed water supply and no CO2 fertilisation.

Figure B25: Straight lines from the centroid of municipalities to Roman roads

Source: See main text.
Note: Roman roads are represented in red and the centroids of municipalities in green. The straight line between both is represented in pink.

Table A10: Summary statistics

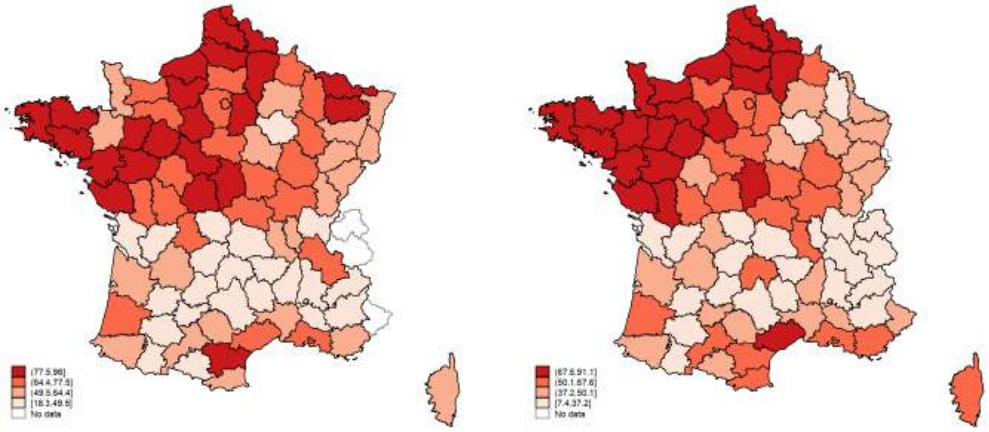
Variable	Mean	Std. Dev.	Min.	Max.	N
Resistance to authority	0.03	0.16	0	1	37416
Resistance to feudalism	0.02	0.15	0	1	37416
Other rebellions	0.11	0.32	0	1	37416
Political club	0.14	0.35	0	1	37416
Political club affiliated to the Jacobin Club	0.02	0.14	0	1	37416
Birthplace of people prosecuted - 1851	0.15	0.35	0	1	37416
Birthplace of people with heavy penalty - 1851	0.09	0.29	0	1	37416
Percentage of people prosecuted - 1851	0.06	0.27	0	8.33	35,127
Percentage of people with heavy penalty - 1851	0.03	0.16	0	6.67	35,127
Electoral support for the Republicans in:					
1848	44.8	18.5	3.8	100	32372
1848 (presidential election)	20.9	17.3	0	100	32372
1849	42.2	20.3	2.7	100	32372
1876	48.4	30.7	0	100	35223
1881	72.3	28.2	0	100	34512
1885	49.8	22.5	0	100	35262
1889	51.9	26	0	100	35281
Turnout level in:					
1848	82.8	8.1	23	100	32377
1848 (presidential election)	75.9	7	18	100	32377
1849	68.5	7.8	20.6	100	32377
1876	78.9	10.2	3.6	100	35223
1881	72.2	14	1.4	100	34512
1885	80.2	9.1	0	100	35266
1889	79.8	9.9	0	100	35285
Freehold law	0.56	0.5	0	1	37416
Historical freehold land toponymy	0.11	0.32	0	1	20375
Current freehold land toponymy	0.08	0.27	0	1	37416
Distance to historical freehold land toponymy	6.6	4.8	0	47.6	19967
Distance to current freehold land toponymy	7.8	5.7	0	55.6	37416
Distance to *Ius Italicum*	274.1	152.7	1.3	809.3	37416
Distance to Roman roads	8.8	8.8	0	86.1	37416
Distance to waterways	14.5	17	0	185.3	37416
Distance to universities	71.3	37.4	0	296.5	37416

Distance to bishopric centre	54.9	28.7	0	178.5	37416
Distance to Dominican monasteries	28.8	15.1	0	100	37416
Distance to Cluniac monasteries	38.6	35.3	0	301.2	37416
Pays d'etats	0.31	0.46	0	1	37416
Ruggedness	91.8	122.8	0	1231.1	37276
Altitude (m)	276.2	289.7	1	2727	37279
Population - 1848	1627	25475.9	24	1053297	36310
Area (km^2)	15.7	16.1	0	757.8	37279
Industry - 1839	0.1	0.3	0	1	37416
Wheat Suitability	5955.8	1822.4	0	10000	37278
Barley Suitability	5501.7	1717	0	9978	37278
Buckwheat Suitability	5332.2	1606	0	9815	37278
Oat Suitability	6068.9	1917.7	0	10000	37278
Rye Suitability	5809.5	1857.1	0	10000	37278
Potato Suitability	4765.9	1456.7	0	9506	37278

Source: See main text.

Notes: All distances are reported in kilometres.

C Empirical Strategy

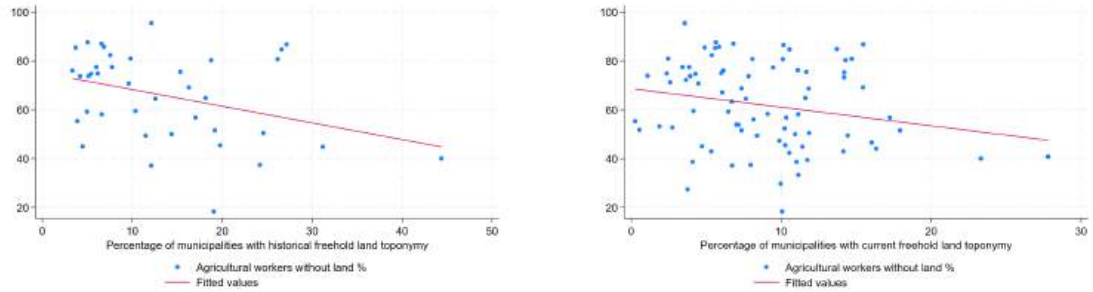


1851 1872

Figure B26: Share of landless agricultural workers

Source: See main text.

Notes: The share of landless workers is computed as the share of agricultural workers who do not own the land they are working on.



Historical toponymy Current toponymy

Figure B27: Percentage of freehold land municipalities according to the toponymy and landholding inequalities in 1851

Source: See main text.

Notes: Landholding inequalities are defined as the percentage of landless workers at the department level.

Table A11: Freehold land municipalities according to toponymy and landholding inequality

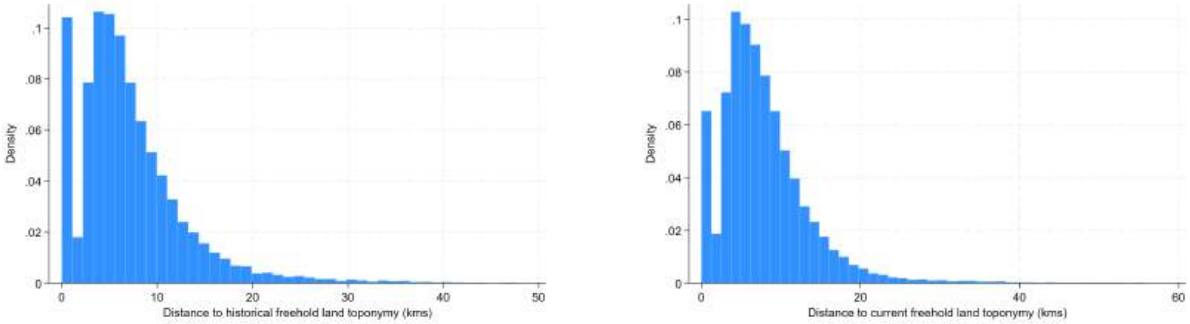
	(1)	(2)	(3)	(4)	(5)	(6)
	Agricultural workers without land %, 1851					
Historical freehold land toponymy	-0.682**	-0.548**	-0.566**	–	–	–
	(0.271)	(0.242)	(0.259)			
Current freehold land toponymy	–	–	–	-0.761**	-0.885***	-0.981***
				(0.319)	(0.303)	(0.341)
Industrial production	–	-0.042	-0.051	–	0.020	0.024
		(0.029)	(0.035)		(0.017)	(0.015)
Land tax	–	2.605	3.583	–	4.281***	4.036***
		(2.003)	(2.662)		(1.121)	(1.232)
Personal property tax	–	1.208	-6.321	–	-9.205**	-5.224
		(16.516)	(21.873)		(4.240)	(6.108)
Doors and windows tax	–	62.475**	63.248**	–	25.249*	13.322
		(25.187)	(24.562)		(13.145)	(17.649)
Literacy rate	–	-0.524***	-0.540***	–	-0.281**	-0.236*
		(0.168)	(0.172)		(0.131)	(0.131)
Urban pop (%)	–	–	0.203	–	–	0.147
			(0.415)			(0.204)
Area	–	–	-0.008	–	–	0.030**
			(0.022)			(0.014)
Observations	39	39	39	80	80	80
R^2	0.126	0.512	0.520	0.048	0.267	0.310

Robust standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: The two main independent variables are the percentage of freehold land municipalities according to the historical or current toponymy. The industrial production is per inhabitant and reported in francs for the year 1840. Land, personal property and doors and windows taxes are reported in francs per capita in 1848. Literacy is defined as the percentage of men able to sign their marriage contract in 1854. Urban population is measure in 1846 and the area is measured in hectares. Corsica is not included in the estimations. The five departments that constitute the historical Brittany region (Cotes-d'Armor, Finistère, Ille-et-Vilaine, Loire-Atlantique, Morbihan) are also excluded from the analysis. The Empirical Strategy details the reasons behind this choice.

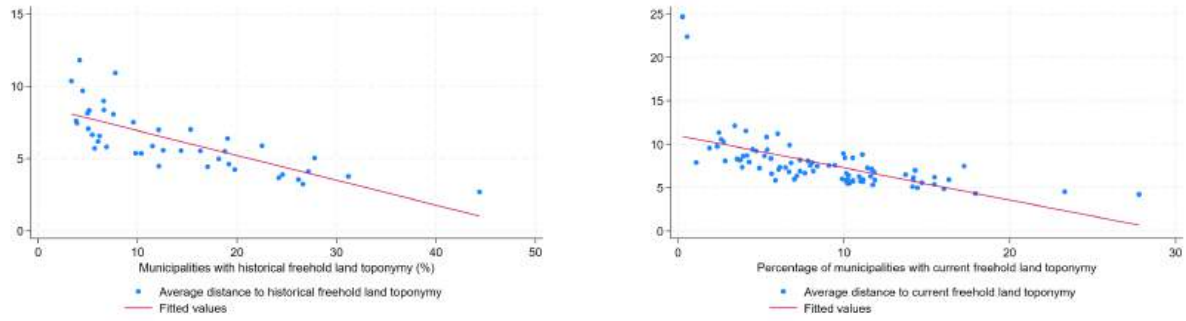


Historical toponymy Current toponymy

Figure B28: Histograms of the distance from towns with historical or current freehold land toponymy

Source: See main text.

Notes: The distance to municipalities with freehold land toponymy is measured in kilometres.



Historical toponymy Current toponymy

Figure B29: Percentage of municipalities with freehold land toponymy and average distance to these municipalities

Source: See main text.

Notes: The distance to municipalities with freehold land toponymy is measured in kilometres. The percentage of municipalities with freehold land toponymy and the average distance to these municipalities are defined at the department level.

Table A12: Towns that were granted the *Ius Italicum*

Roman Town	Current Town	Country	Year or Emperor
Dyrrachium	Durrës	Albania	Augustus
Cartenna	Ténès	Algeria	Augustus
Gunugu		Algeria	Augustus
Rusazu		Algeria	Augustus
Rusguinae	El Marsa	Algeria	Augustus
Saldae	Béjaïa	Algeria	Augustus
Tubusuctu	El Kseur	Algeria	Augustus
Lugdunum (Colonia Copia Claudia Augusta Lugudunensis)	Lyon	France	43 BC
Vienna (Colonia Julia Vienna)	Vienne	France	Julius Caesar
Arausio	Orange	France	35 BC
Baeterrae	Béziers	France	Augustus
Forum Julii	Fréjus	France	Augustus
Narbo	Narbonne	France	Julius Caesar
Colonia Agrippinensis	Cologne	Germany	Claudius
Philippi (Colonia Augusta Julia Philippi)		Greece	Augustus
Cassandrea (Colonia Julia Augusta Cassandria)		Greece	Augustus
Dium (Colonia Julia Augusta Dium)		Greece	Augustus
Patrae (Colonia Augusta Aroe Patrarum)	Patras	Greece	Augustus
Thermae Himeraeae	Termini Imerese	Italia	Augustus
Berytus (Colonia Julia Augusta Fehx Berytus)	Beirut	Lebanon	Augustus
Tyr (Colonia Septima Tyrus)	Tyre	Lebanon	64 BC
Sidon (Colonia Aurelia Pia metropolis Sidon)	Sidon	Lebanon	Heliogabalus
Colonia Julia Augusta Felix Heliopolis	Baalbek	Lebanon	Augustus
Leptis Magna		Libya	Trajan
Stobi		North Macedonia	Heliogabalus
Pax Julia	Beja	Portugal	Julius Caesar
Zerna (Colonia Zernensium)	Orsova	Romania	Trajan
Napoca (Colonia Aurelia Napocensis)	Cluj-Napoca	Romania	Marcus Aurelius or Commodus
Apulum (Colonia Apulensis)	Alba Iulia	Romania	Marcus Aurelius or Commodus
Potaissa (Colonia Potaissa)	Turda	Romania	Septimius Severus
Ulpia Traiana Sarmizegetusa (Colonia Ulpia Trlajana Augusta Dapica Sarmizegethusa)		Romania	Trajan
Emerita	Merida	Spain	Augustus
Valentia (Colonia Italien Valentia)	Valencia	Spain	138 BC
Ilici (Colonia Julia Ilici Augusta)	Elche	Spain	Augustus
Acci (Colonia Julia Gemella Accitana)	Purullena	Spain	Julius Caesar
Libisosa (Colonia Libisosana Forum Augustmn)	Lezuza	Spain	Augustus
Barcino	Barcelona	Spain	Augustus
Caesaraugusta	Zaragoza	Spain	Augustus
Corduba	Cordoba	Spain	46 BC
Apamea		Syria	Augustus
Colonia Laodicca	Latakia	Syria	Septimius Severus
Emese	Homs	Syria	Heliogabalus
Carthago	Carthage	Tunisia	Julius Caesar
Utique		Tunisia	Julius Caesar
Thuburbo Minus	Tebourba	Tunisia	Augustus
Thuburnica	Chemtou	Tunisia	Augustus
Uthina		Tunisia	Augustus
Sinope	Sinop	Turkey	Augustus
Alexandria Troas (Alexandria Troas)		Turkey	Augustus
Parium (Colonia Gemella Julia Parium)	Kemer	Turkey	Augustus
Antioche (of Pisidia) (Colonia Caesaria Antiochia)		Turkey	Augustus

Source: See main text.

Notes: When no current town is specified, it means that the Roman town which was granted the *Ius Italicum* doesn't exist today. The Emperor which granted a town the *Ius Italicum* is specified, as it is most of the times impossible to know the exact year when the town was granted this privilege. It is possible to know it exactly for five of them, which obtained the *Ius Italicum* during the Roman Republic.

Table A13: Towns granted the *Ius Italicum* - Periods of foundation

Foundation	Number of Towns	Percent	Cumulative Percent
138 BC	1	1.96	1.96
64 BC	1	1.96	3.92
46 BC	1	1.96	5.88
43 BC	1	1.96	7.84
35 BC	1	1.96	9.80
Julius Caesar (52 BC - 44 BC)	6	11.76	21.56
Augustus (27 BC - AD 14)	29	56.86	78.42
Claudius (AD 41 - AD 54)	1	1.96	80.38
Trajan (AD 98 - AD 117)	3	5.88	86.26
Marcus Aurelius or Commodus (AD 161 - AD 180 ; AD 180 - AD 192)	2	3.92	90.18
Septimius Severus (AD 193 - AD 211)	2	3.92	94.12
Heliogabalus (AD 218 – AD 222)	3	5.88	100.00
Total	51	100.00	

Source: See main text.

Notes: For each Emperor, the dates specified correspond to the period of their reign. The first five dates are not related to any Emperor as they correspond to the Roman Republic. Julius Caesar was not officially an Emperor, but considering its importance in the Republic, I assign him a fictitious reign starting from the Battle of Alesia do his death.

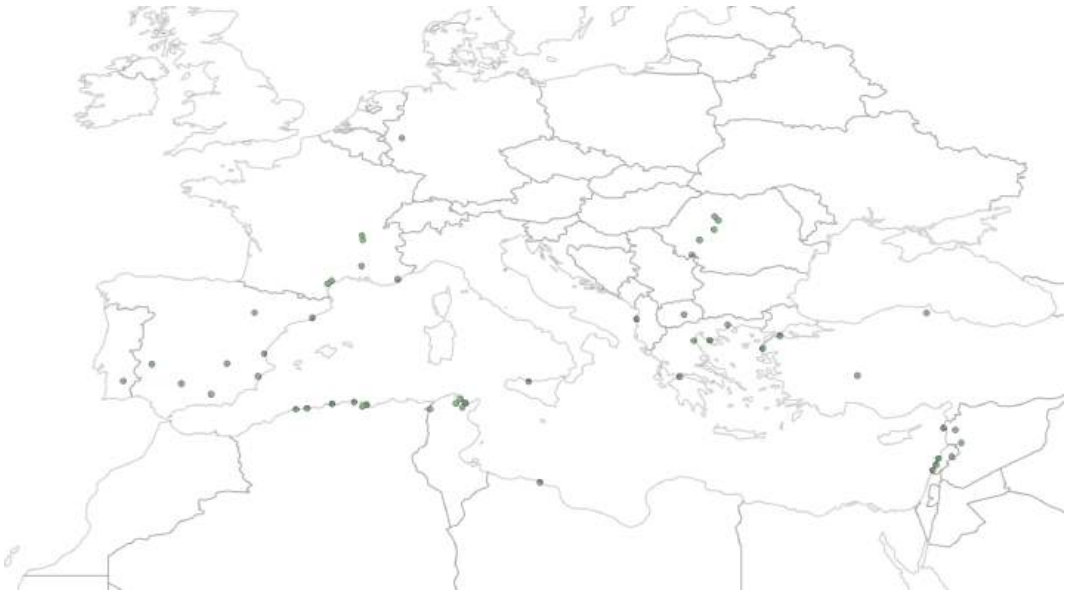


Figure B30: Towns with *Ius Italicum*

Source: See main text.

Note: Each dot corresponds to a Roman town granted the *Ius Italicum*.

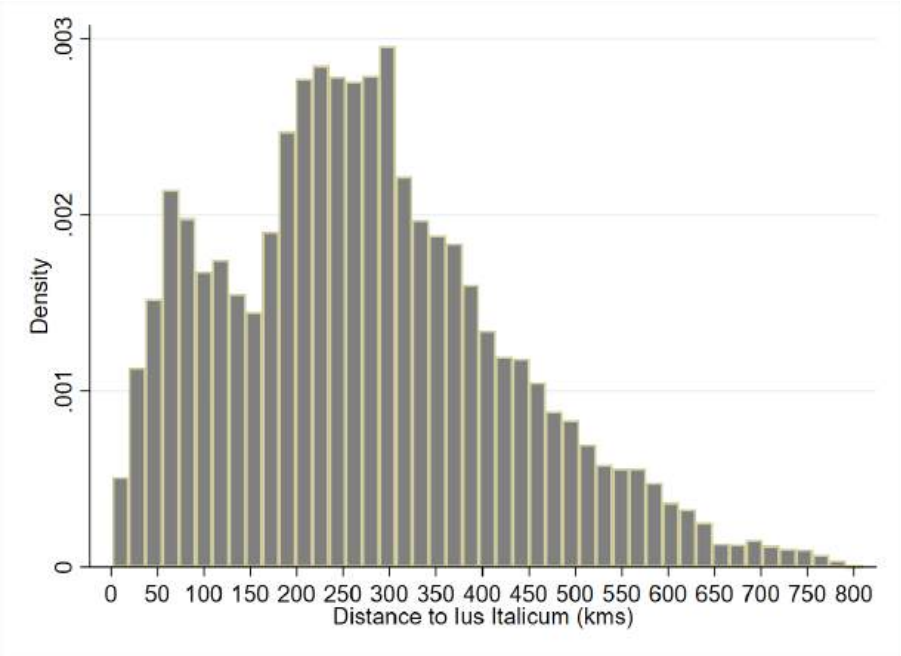
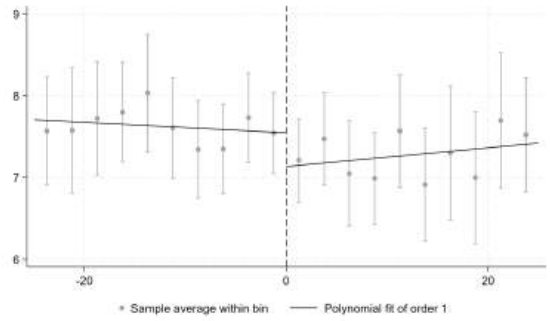


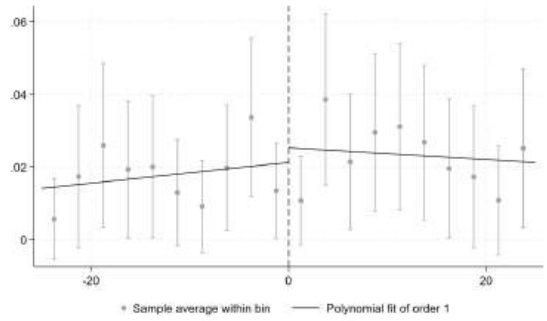
Figure B31: Histograms of the distance from towns with *Ius Italicum*

Source: See main text.

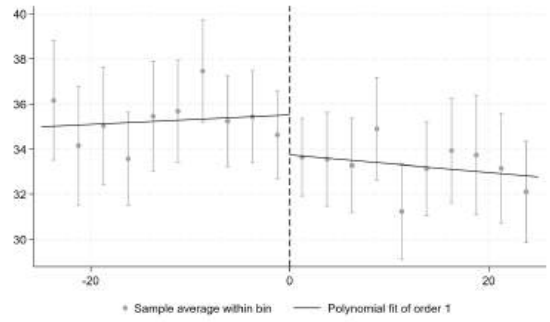
Notes: The distance is reported for all municipalities in kilometres.



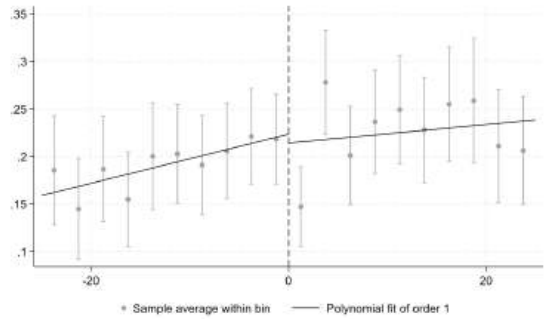
Distance to current freehold land toponymy



Resistance to state and local authority



Support for the Republicans - Second Republic elections



Municipalities with people prosecuted

Figure B32: Distance to the customary laws frontier, freehold land and political outcomes

Source: See main text.

Notes: On the x-axis, the distance to the customary laws frontier based on the legislation on freehold land is displayed. A negative distance corresponds to being west of the frontier, where customary laws were not favourable to freehold land. A positive distance corresponds to customary laws east of the frontier and more favourable to freehold land. The polynomial fit used is of order one and 95% confidence interval are reported. Distance to current freehold land toponymy is in kilometres. Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. The Second Republic elections considered are the legislative elections of 1848, 1849 and the presidential election of 1848. The support for the Republicans is defined as the percentage of votes in favour of all Republican coalitions. Municipality with people prosecuted is a binary variable equal to one if at least one person born in this municipality was prosecuted after the 1851 coup d'état.

Table A14: Exclusion restriction

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Distance to:									
	Roman roads	Waterways	Universities	Bishoprics	Dominican monasteries	Roman roads	Waterways	Universities	Bishoprics	Dominican monasteries
Distance to *Ius Italicum*	-0.003	-0.016*	0.030	0.011	0.007	-0.002	-0.003	0.042	0.025	0.001
	(0.003)	(0.009)	(0.034)	(0.022)	(0.005)	(0.002)	(0.006)	(0.035)	(0.023)	(0.006)
Distance to Roman roads	–	–	–	–	–	–	0.139*	0.081	0.733***	0.251***
							(0.075)	(0.157)	(0.136)	(0.086)
Distance to waterways	–	–	–	–	–	0.041	–	0.551***	-0.067	0.039
						(0.027)		(0.099)	(0.102)	(0.044)
Distance to universities (kms)	–	–	–	–	–	0.005	0.105***	–	0.009	0.074***
						(0.009)	(0.034)		(0.070)	(0.022)
Distance to bishopric centre (kms)	–	–	–	–	–	0.070***	-0.022	0.016	–	0.096***
						(0.019)	(0.036)	(0.121)		(0.028)
Distance to Dominican monasteries (kms)	–	–	–	–	–	0.083***	0.044	0.438***	0.334***	–
						(0.030)	(0.044)	(0.127)	(0.084)	
Ruggedness	–	–	–	–	–	0.004	0.047***	0.030	0.058***	-0.009
						(0.005)	(0.017)	(0.022)	(0.017)	(0.006)
Wheat Suitability	–	–	–	–	–	-0.0004**	-0.0001	0.002	0.002**	0.0004
						(0.000)	(0.000)	(0.001)	(0.001)	(0.000)
Observations	37416	37416	37416	37416	37416	37276	37276	37276	37276	37276
R^2	0.003	0.021	0.015	0.003	0.005	0.129	0.215	0.142	0.151	0.120

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: All distance are reported in kilometres. The altitude of municipalities is measured in meters and the area in squared kilometres. Standard errors are clustered at the district level.

Table A15: Exclusion restriction - Ruggedness and wheat suitability

	(1)	(2)	(3)	(4)
	Ruggedness	Wheat Suitability	Ruggedness	Wheat Suitability
Distance to *Ius Italicum*	-0.324***	2.068***	-0.004	-0.474
	(0.033)	(0.429)	(0.014)	(0.447)
Altitude	–	–	0.334***	-2.657***
			(0.019)	(0.206)
Observations	37276	37278	37276	37278
R^2	0.163	0.030	0.626	0.163

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Distance to *Ius Italicum* is reported in kilometres. The altitude of municipalities is measured in meters. Standard errors are clustered at the district level.

Table A16: Exclusion restriction using 19th-century characteristics

	(1) Factories	(2) Factories	(3) Production	(4) Workers	(5) Steam engines	(6) Postal taxes
Distance to *Ius Italicum*	0.0003	-0.001	-1979.735	-0.805	0.0002	0.003
	(0.001)	(0.007)	(1827.877)	(0.688)	(0.000)	(0.002)
Observations	37416	4213	4213	4213	4213	31813
R^2	0.000	0.000	0.002	0.002	0.000	0.000

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: The distance to cities with *Ius Italicum* is reported in kilometres. Factories, workers and steam engines stand respectively for the number of factories, industrial workers and steam engines. The industrial production and the volume of postal taxes are in francs. From column (2) to (5), the sample of municipalities is restricted to the ones with at least one industrial factory Standard errors are clustered at the district level.

Table A17: Exclusion restriction using 19th-century population levels

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	10
	Population									
	1793	1800	1806	1821	1831	1836	1841	1846	1851	1856
Distance to *Ius Italicum*	2.508	2.163	2.386	2.390	2.820	3.059	3.185	3.531	3.562	3.788
	(1.907)	(1.610)	(1.903)	(1.931)	(2.367)	(2.770)	(2.727)	(3.063)	(3.049)	(3.393)
Observations	36279	36781	36695	36595	34721	35649	36142	36310	35127	35925
R^2	0.0006	0.0006	0.0005	0.0005	0.0005	0.0004	0.0005	0.0005	0.0004	0.0004
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	1861	1866	1872	1876	1881	1886	1891	1896	1901	1906
Distance to *Ius Italicum*	5.364	5.743	5.792	6.180	6.983	7.258	7.564	7.812	8.360	8.530
	(4.909)	(5.284)	(5.354)	(5.745)	(6.537)	(6.755)	(7.054)	(7.311)	(7.821)	(7.964)
Observations	36612	36417	36583	37348	37369	37367	37369	37379	37381	37380
R^2	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: The distance to cities with *Ius Italicum* is reported in kilometres. Standard errors are clustered at the district level.

D Estimation Outcomes

D.1 Resistance to Authorities and Feudalism

Table A18: Freehold land, resistance to authority and feudalism. Toponyms reported before 1600

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority		Resistance to feudalism		Resistance to state and local authority		Resistance to feudalism	
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0106***	-0.1864***	-0.0023	-0.1305*	-0.0091***	-0.1519**	-0.0021	-0.0851
	(0.0028)	(0.0652)	(0.0026)	(0.0710)	(0.0026)	(0.0623)	(0.0021)	(0.0619)
Freehold law	–	–	–	–	0.0179***	0.0280**	0.0114***	0.0173*
					(0.0042)	(0.0122)	(0.0041)	(0.0089)
ln Distance to Roman roads	–	–	–	–	-0.0010	0.0009	0.0023	0.0034
					(0.0020)	(0.0048)	(0.0049)	(0.0059)
ln Distance to waterways	–	–	–	–	-0.0027	-0.0074	-0.0013	-0.0040
					(0.0019)	(0.0046)	(0.0027)	(0.0046)
ln Distance to universities	–	–	–	–	0.0079**	0.0176*	0.0133*	0.0189
					(0.0035)	(0.0102)	(0.0077)	(0.0119)
ln Distance to bishopric centre	–	–	–	–	-0.0013	0.0117	0.0102*	0.0177
					(0.0038)	(0.0115)	(0.0053)	(0.0110)
ln Distance to Dominican monasteries	–	–	–	–	-0.0198***	-0.0093	-0.0185*	-0.0124
					(0.0044)	(0.0103)	(0.0102)	(0.0096)
ln Ruggedness	–	–	–	–	-0.0021	-0.0148**	0.0042**	-0.0032
					(0.0022)	(0.0071)	(0.0017)	(0.0058)
ln Wheat Suitability	–	–	–	–	-0.0100	0.0131	0.0017	0.0151
					(0.0062)	(0.0112)	(0.0036)	(0.0111)
Observations	19502	19502	19502	19502	19433	19433	19433	19433
R^2	0.003		0.000		0.012		0.011	
$F-stat$		8.503		8.503		8.110		8.110

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Standard errors are clustered at the district level.

Table A19: Freehold land, resistance to authority and feudalism - binary freehold land variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
Historical freehold land toponymy	0.0414***	0.5504***	–	–	0.0165***	0.3064	–	–
	(0.0063)	(0.1541)			(0.0052)	(0.1972)		
Current freehold land toponymy	–	–	0.0260***	0.8930***	–	–	0.0039	0.4470**
			(0.0054)	(0.1992)			(0.0042)	(0.2189)
Freehold law	0.0177***	0.0186**	0.0150***	0.0191***	0.0113***	0.0118**	0.0054	0.0075
	(0.0042)	(0.0074)	(0.0030)	(0.0055)	(0.0041)	(0.0052)	(0.0040)	(0.0046)
ln Distance to Roman roads	-0.0017	0.0030	-0.0017	0.0020	0.0025	0.0052	0.0002	0.0021
	(0.0021)	(0.0036)	(0.0014)	(0.0027)	(0.0048)	(0.0063)	(0.0029)	(0.0038)
ln Distance to waterways	-0.0048**	-0.0123***	-0.0007	-0.0076**	-0.0018	-0.0060	0.0003	-0.0032
	(0.0021)	(0.0044)	(0.0016)	(0.0029)	(0.0026)	(0.0050)	(0.0019)	(0.0033)
ln Distance to universities	0.0066*	0.0059	0.0039	-0.0089*	0.0122	0.0118	0.0027	-0.0038
	(0.0037)	(0.0067)	(0.0026)	(0.0053)	(0.0075)	(0.0077)	(0.0048)	(0.0042)
ln Distance to bishopric centre	-0.0022	0.0005	-0.0044	-0.0069	0.0098*	0.0114*	0.0018	0.0005
	(0.0039)	(0.0054)	(0.0027)	(0.0044)	(0.0052)	(0.0062)	(0.0032)	(0.0035)
ln Distance to Dominican monasteries	-0.0213***	-0.0209***	-0.0181***	-0.0125**	-0.0183*	-0.0181*	-0.0118**	-0.0089*
	(0.0047)	(0.0067)	(0.0033)	(0.0053)	(0.0099)	(0.0100)	(0.0054)	(0.0050)
ln Ruggedness	-0.0031	-0.0167***	0.0001	-0.0019	0.0036**	-0.0041	0.0056***	0.0046***
	(0.0022)	(0.0058)	(0.0014)	(0.0026)	(0.0016)	(0.0052)	(0.0015)	(0.0018)
ln Wheat Suitability	-0.0138**	-0.0049	-0.0020	0.0024	0.0015	0.0065	0.0013	0.0035
	(0.0067)	(0.0085)	(0.0016)	(0.0029)	(0.0035)	(0.0056)	(0.0020)	(0.0028)
Observations	19837	19837	35785	35785	19837	19837	35785	35785
R^2	0.018		0.009		0.011		0.004	
$F-stat$		18.516		31.430		18.516		31.430

Standard errors in parentheses

* $p<0.1$, ** $p<0.05$, *** $p<0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Historical freehold land toponymy is also a binary variable which are equal to one if the historical toponymy of the municipalities refers to freehold land (CTHS, 2020). The current toponymy variable is the exact equivalent, but relying on the current toponymy of the municipality only (CDIP, 2006). Standard errors are clustered at the district level.

Table A20: Freehold land, resistance to authority and feudalism. Municipalities with a freehold land toponymy excluded

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	0.0017	-0.1795***	–	–	0.0009	-0.0950	–	–
	(0.0028)	(0.0604)			(0.0049)	(0.0687)		
ln Distance to current freehold land toponymy	–	–	0.0044*	-0.1956***	–	–	-0.0015	-0.1155**
			(0.0024)	(0.0624)			(0.0025)	(0.0577)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	17219	17219	33031	33031	17219	17219	33031	33031
R^2	0.004		0.006		0.009		0.004	
$F-stat$		14.696		13.040		14.696		13.040

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Municipalities identified as freehold land according to either the historical or current toponymy (therefore with a distance of zero to historical or current freehold land toponymy) are excluded from the estimations. Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

Table A21: Freehold land, resistance to authority and feudalism. Inverse hyperbolic sine transformation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
Distance to historical freehold land toponymy	-0.0118***	-0.1060***	–	–	-0.0046**	-0.0592	–	–
	(0.0020)	(0.0310)			(0.0022)	(0.0378)		
Distance to current freehold land toponymy	–	–	-0.0048***	-0.1288***	–	–	-0.0014	-0.0646**
			(0.0016)	(0.0335)			(0.0012)	(0.0321)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	35785	35785	19433	19433	35785	35785
R^2	0.017		0.009		0.012		0.004	
$F-stat$		19.761		21.151		19.761		21.151

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level. All distance variables are computed using an inverse hyperbolic sine transformation instead of a logarithmic transformation.

Table A22: Freehold land, resistance to authority and feudalism. Exclusion of the top 25% of municipalities as regards the distance to *Ius Italicum*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0165***	-0.1225***	–	–	-0.0074**	-0.0622	–	–
	(0.0028)	(0.0350)			(0.0035)	(0.0403)		
ln Distance to current freehold land toponymy	–	–	-0.0072***	-0.1782***	–	–	-0.0017	-0.0845*
			(0.0021)	(0.0508)			(0.0017)	(0.0440)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	15153	15153	27941	27941	15153	15153	27941	27941
R^2	0.017		0.009		0.014		0.005	
$F-stat$		22.606		16.057		22.606		16.057

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

Table A23: Freehold land, resistance to authority and feudalism - Additional control: number of places per municipality

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0126***	-0.1684***	–	–	-0.0034	-0.0895	–	–
	(0.0024)	(0.0625)			(0.0023)	(0.0654)		
Historical freehold land toponymy	–	–	0.0411***	0.8826**	–	–	0.0132***	0.4693
			(0.0064)	(0.3678)			(0.0046)	(0.3566)
Density of places	0.0002***	-0.0013**	0.0003***	-0.0021*	0.0003**	-0.0006	0.0003**	-0.0010
	(0.0001)	(0.0006)	(0.0001)	(0.0011)	(0.0001)	(0.0006)	(0.0001)	(0.0009)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19322	19322	19322	19322	19322	19322	19322	19322
R^2	0.017		0.020		0.013		0.014	
$F-stat$		11.313		6.874		11.313		6.874

Standard errors in parentheses

* $p<0.1$, ** $p<0.05$, *** $p<0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Historical freehold land toponymy is also a binary variable which are equal to one if the historical toponymy of the municipalities refers to freehold land (CTHS, 2020). The density of places correspond to the number of places per municipality at the department level reported in the historical toponymy data. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

Table A24: Freehold land, resistance to authority and feudalism - Additional control: number of old names per place

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0142***	-0.1283***	–	–	-0.0052*	-0.0722	–	–
	(0.0024)	(0.0379)			(0.0031)	(0.0471)		
Historical freehold land toponymy	–	–	0.0438***	0.5863***	–	–	0.0161***	0.3300
			(0.0064)	(0.1693)			(0.0054)	(0.2134)
Density of old names	-0.0004	0.0059**	-0.0006	0.0075**	-0.0006	0.0031	-0.0007	0.0040
	(0.0009)	(0.0028)	(0.0009)	(0.0030)	(0.0021)	(0.0043)	(0.0020)	(0.0049)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19322	19322	19322	19322	19322	19322	19322	19322
R^2	0.016		0.019		0.012		0.013	
$F-stat$		18.982		15.848		18.982		15.848

Standard errors in parentheses

* $p<0.1$, ** $p<0.05$, *** $p<0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Historical freehold land toponymy is also a binary variable which are equal to one if the historical toponymy of the municipalities refers to freehold land (CTHS, 2020). The density of old names correspond to the number of old names per place at the department level reported in the historical toponymy data. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

Table A25: Freehold land, resistance to authority and feudalism - with counties of Brittany

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0145***	-0.1242***	–	–	-0.0059**	-0.0712	–	–
	(0.0024)	(0.0385)			(0.0028)	(0.0475)		
ln Distance to current freehold land toponymy	–	–	-0.0057***	-0.1398***	–	–	-0.0019	-0.0778*
			(0.0019)	(0.0412)			(0.0015)	(0.0409)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19898	19898	37276	37276	19898	19898	37276	37276
R^2	0.015		0.008		0.011		0.004	
$F-stat$		17.425		18.094		17.425		18.094

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

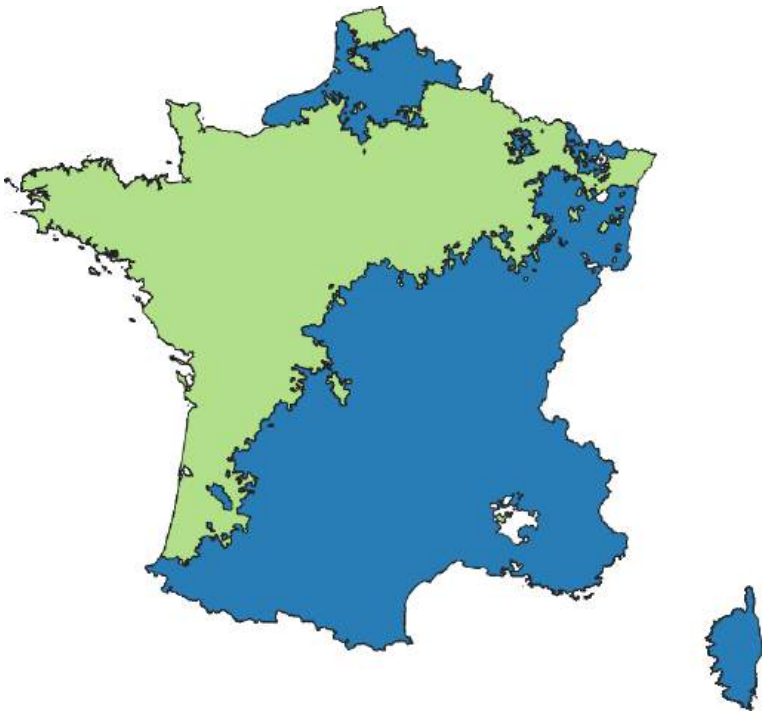


Figure B33: Impartible (blue) and partible (green) inheritance customs in Ancien Régime France

Source: (Gay et al., 2024b)

Note: Partible inheritance customs could be either strict or with option. Impartible inheritance customs could favor either the first born (primogeniture), the last born (ultimogeniture), or any of the offspring (unigeniture).

Table A26: Freehold land, resistance to authority and feudalism. Additional control: inheritance customs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0134***	-0.1606**	–	–	-0.0050*	-0.0840	–	–
	(0.0024)	(0.0627)			(0.0028)	(0.0661)		
ln Distance to current freehold land toponymy	–	–	-0.0051***	-0.1837***	–	–	-0.0018	-0.0771
			(0.0019)	(0.0593)			(0.0015)	(0.0487)
Impartible inheritance custom	0.0102***	-0.0188	0.0070**	-0.0181	0.0083**	-0.0073	0.0104***	-0.0002
	(0.0032)	(0.0148)	(0.0028)	(0.0116)	(0.0035)	(0.0122)	(0.0034)	(0.0076)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19425	19425	35055	35055	19425	19425	35055	35055
R^2	0.016		0.008		0.013		0.005	
$F-stat$		10.115		12.378		10.115		12.378

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Impartible inheritance custom is a binary variable which is equal to one if the municipality was located in the impartible inheritance area. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

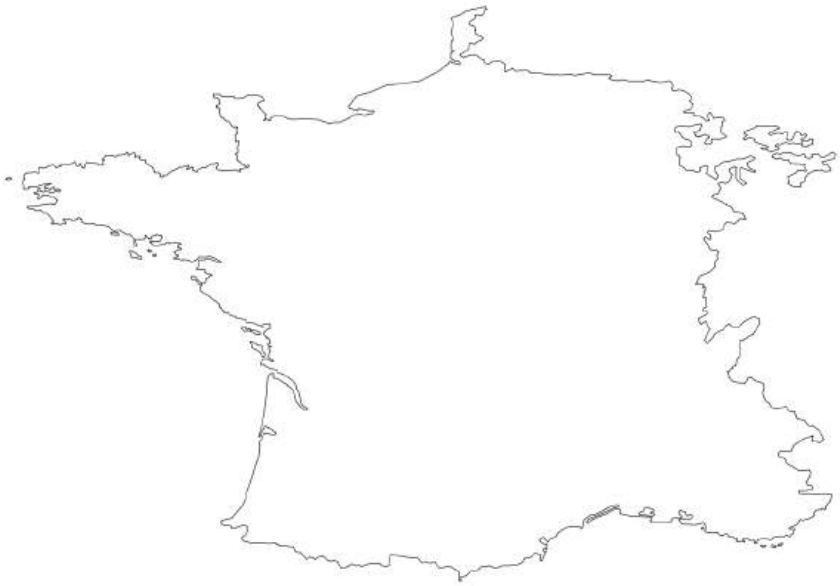


Figure B34: Map of France in 1610

Source: http://geo-larhra.ish-lyon.cnrs.fr/?q=geocatalogue/vectors

Table A27: Freehold land, resistance to authority and feudalism. Restriction to the early-17th century borders

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0150***	-0.1190***	–	–	-0.0043	-0.0736	–	–
	(0.0026)	(0.0386)			(0.0030)	(0.0451)		
ln Distance to current freehold land toponymy	–	–	-0.0051**	-0.3472**	–	–	-0.0021	-0.2377*
			(0.0021)	(0.1498)			(0.0017)	(0.1257)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	16575	16575	29131	29131	16575	16575	29131	29131
R^2	0.016		0.009		0.012		0.005	
$F-stat$		17.038		5.911		17.038		5.911

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

Table A28: Freehold land, resistance to authority and feudalism. Exclusion of the future administrative centres of departments and arrondissements

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0089***	-0.1334***	–	–	-0.0046	-0.0716	–	–
	(0.0021)	(0.0375)			(0.0028)	(0.0440)		
ln Distance to current freehold land toponymy	–	–	-0.0048***	-0.1555***	–	–	-0.0017	-0.0811**
			(0.0017)	(0.0399)			(0.0014)	(0.0370)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19258	19258	35435	35435	19258	19258	35435	35435
R^2	0.008		0.004		0.010		0.003	
$F-stat$		20.857		21.325		20.857		21.325

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

Table A29: freehold land, resistance to authority and feudalism - Rebellions from 1600 onwards

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0131***	-0.1229***	–	–	-0.0056**	-0.0700	–	–
	(0.0024)	(0.0362)			(0.0028)	(0.0450)		
ln Distance to current freehold land toponymy	–	–	-0.0055***	-0.1440***	–	–	-0.0017	-0.0742**
			(0.0019)	(0.0377)			(0.0015)	(0.0370)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	35785	35785	19433	19433	35785	35785
R^2	0.015		0.008		0.012		0.004	
$F-stat$		20.358		21.148		20.358		21.148

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

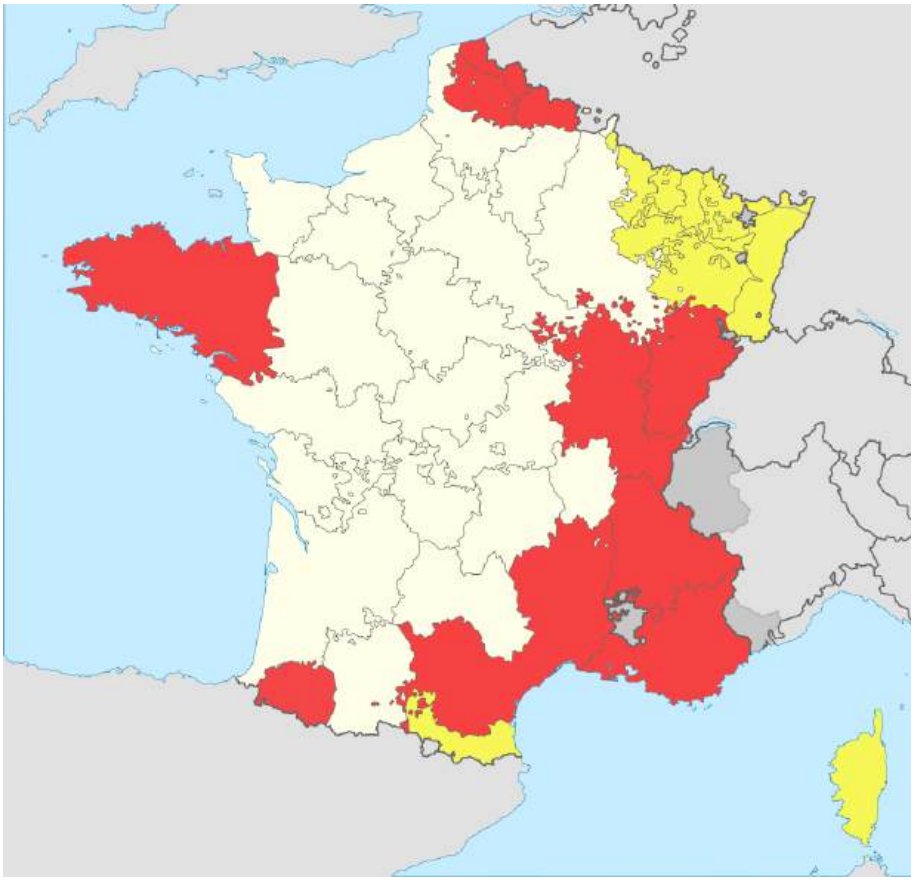


Figure B35: *Pays d'etats*, *pays d'élection* and *pays d'imposition* in France in 1789

Source: https://commons.wikimedia.org/wiki/File:Pays_d%27Etats,_d%27Imposition_et_d%27Election.svg

Note: The *Pays d'etats* are in red on the map, the *pays d'élection* in white and the *pays d'imposition* in yellow.

Table A30: Freehold land, resistance to authority and feudalism. Additional control: belonging to a *Pays d'etats*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0143***	-0.1009***	–	–	-0.0058**	-0.0469	–	–
	(0.0024)	(0.0274)			(0.0029)	(0.0338)		
ln Distance to current freehold land toponymy	–	–	-0.0052***	-0.1535***	–	–	-0.0013	-0.0630*
			(0.0019)	(0.0407)			(0.0015)	(0.0365)
Pays d'etats	0.0102**	0.0167**	0.0103***	-0.0036	0.0126*	0.0157*	0.0150***	0.0092*
	(0.0043)	(0.0069)	(0.0037)	(0.0074)	(0.0069)	(0.0086)	(0.0056)	(0.0056)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	35785	35785	19433	19433	35785	35785
R^2	0.016		0.009		0.013		0.006	
$F-stat$		26.795		21.246		26.795		21.246

Standard errors in parentheses

* $p<0.1$, ** $p<0.05$, *** $p<0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. *Pays d'etats* is a binary variable equal to one if the municipality belonged to a *Pays d'etats* in 1789. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

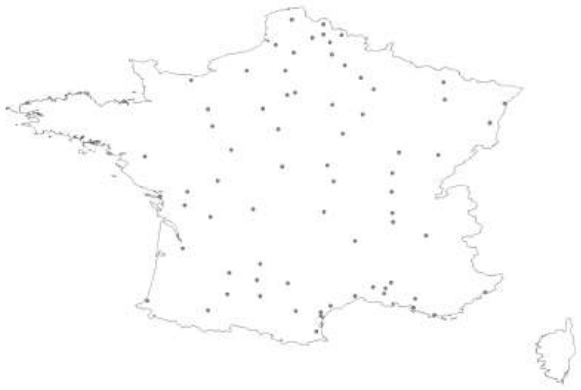


Figure B36: French *Communes* (1000-1800)

Source: See main text.

Note: Each dot represents a French city that had a form of self-governance between 1000 and 1800. These cities are: Abbeville, Agen, Aix, Albi, Alencon,Amiens, Angouleme, Arles, Arras, Auch, Auxerre, Avignon, Bayonne, Beauvais, Besancon, Beziers, Bordeaux, Caen, Cahors, Cambrai, Carcassonne, Chalon-sur-Saône, Chalons-sur-Marne, Chartres, Clermont-Ferrand, Colmar, Dijon, Douai, Grenoble, Issoudin, La Rochelle, Laon, Le Mans, Le Puy-en-Velay, Lille, Limoges, Lyon, Macon, Marseille, Metz, Montauban, Montpellier, Moulins, Nancy, Nantes, Narbonne, Nevers, Nice, Nimes, Niort, Orleans, Paris, Perpignan, Poitiers, Provins, Reims, Rouen, St Omer, St-Jean-d'Angely, St-Malo, St-Quentin, Strasbourg, Tarascon, Tarbes, Toulon, Toulouse, Tours, Troyes, Valenciennes, Versailles and Vienne.

Table A31: Freehold land, resistance to authority and feudalism. Additional control: distance to the *Communes*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0141***	-0.1241***	–	–	-0.0055**	-0.0700	–	–
	(0.0024)	(0.0360)			(0.0028)	(0.0429)		
ln Distance to current freehold land toponymy	–	–	-0.0054***	-0.1460***	–	–	-0.0018	-0.0756**
			(0.0019)	(0.0392)			(0.0015)	(0.0350)
ln Distance to *Communes*	-0.0087	-0.0066	-0.0082**	-0.0035	-0.0032	-0.0020	-0.0012	0.0013
	(0.0053)	(0.0085)	(0.0035)	(0.0057)	(0.0096)	(0.0100)	(0.0063)	(0.0060)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	35785	35785	19433	19433	35785	35785
R^2	0.016		0.009		0.012		0.004	
$F-stat$		20.887		20.542		20.887		20.542

Standard errors in parentheses

* $p<0.1$, ** $p<0.05$, *** $p<0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

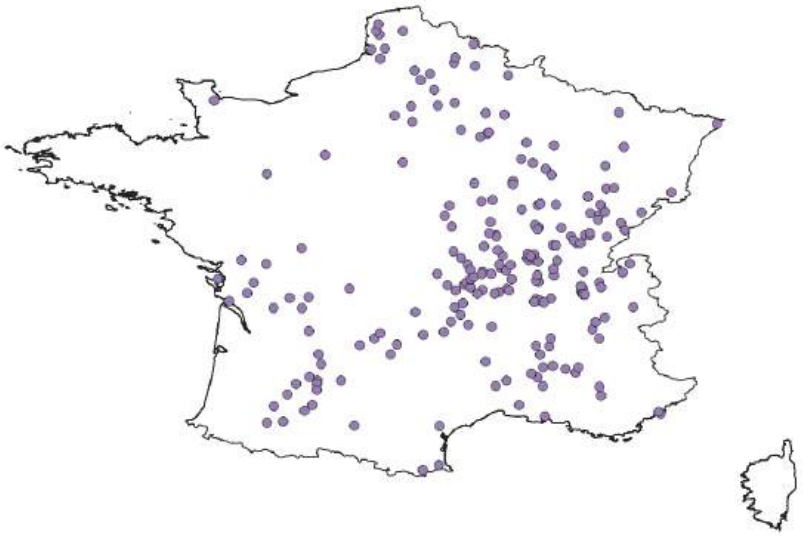


Figure B37: Location of Cluniac Monasteries established by 1109

Source: (McCormick et al., 2023).
Note: Each dot represents the location of a Cluniac monastery.

Table A32: Freehold land, resistance to authority and feudalism - Additional control: distance to Cluniac monasteries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0141***	-0.1204***	–	–	-0.0057*	-0.0599*	–	–
	(0.0024)	(0.0319)			(0.0029)	(0.0360)		
ln Distance to current freehold land toponymy	–	–	-0.0055***	-0.1587***	–	–	-0.0015	-0.0663*
			(0.0019)	(0.0430)			(0.0015)	(0.0354)
ln Distance to Cluniac monasteries	-0.0004	-0.0033	-0.0014	0.0053	-0.0047	-0.0061	-0.0073**	-0.0044
	(0.0024)	(0.0042)	(0.0020)	(0.0042)	(0.0044)	(0.0054)	(0.0032)	(0.0029)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	35785	35785	19433	19433	35785	35785
R^2	0.016		0.008		0.013		0.005	
$F-stat$		25.326		18.586		25.326		18.586

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

Table A33: Freehold land, resistance to authority and feudalism - Additional control: altitude of municipalities

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0138***	-0.1265***	–	–	-0.0055*	-0.0705	–	–
	(0.0024)	(0.0357)			(0.0028)	(0.0449)		
ln Distance to current freehold land toponymy	–	–	-0.0054***	-0.1488***	–	–	-0.0018	-0.0747**
			(0.0018)	(0.0384)			(0.0015)	(0.0369)
Altitude	-0.0146***	-0.0092	-0.0097***	-0.0061	-0.0010	0.0021	0.0035	0.0053*
	(0.0046)	(0.0064)	(0.0029)	(0.0045)	(0.0033)	(0.0046)	(0.0024)	(0.0030)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	35785	35785	19433	19433	35785	35785
R^2	0.018		0.009		0.012		0.004	
$F-stat$		19.892		21.094		19.892		21.094

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

Table A34: Freehold land, resistance to authority and feudalism - Additional control: other suitability indices

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0142***	-0.1180***	–	–	-0.0056*	-0.0699	–	–
	(0.0024)	(0.0329)			(0.0029)	(0.0436)		
ln Distance to current freehold land toponymy	–	–	-0.0053***	-0.1511***	–	–	-0.0021	-0.0799**
			(0.0019)	(0.0402)			(0.0015)	(0.0381)
ln Barley Suitability	0.0261	0.0928**	0.0133	0.0352	0.0057	0.0470	-0.0004	0.0112
	(0.0205)	(0.0365)	(0.0145)	(0.0290)	(0.0197)	(0.0326)	(0.0164)	(0.0200)
ln Buckwheat Suitability	0.0157*	-0.0054	0.0167***	-0.0080	-0.0033	-0.0164	-0.0093	-0.0225**
	(0.0085)	(0.0175)	(0.0044)	(0.0103)	(0.0102)	(0.0180)	(0.0067)	(0.0105)
ln Oat Suitability	-0.0305	-0.0731**	-0.0156	0.0562	0.0388**	0.0123	0.0348**	0.0732**
	(0.0215)	(0.0362)	(0.0153)	(0.0381)	(0.0188)	(0.0326)	(0.0172)	(0.0289)
ln Rye Suitability	0.0154	0.0271	0.0086	-0.0225	-0.0340**	-0.0267	-0.0238	-0.0405*
	(0.0187)	(0.0317)	(0.0143)	(0.0305)	(0.0168)	(0.0212)	(0.0181)	(0.0233)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	35785	35785	19433	19433	35785	35785
R^2	0.016		0.009		0.012		0.005	
$F-stat$		23.206		21.393		23.206		21.393

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority are binary variables which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is a binary variable which is equal to one if at least a rebellion against feudalism took place in the municipality at stake. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A35: Freehold land, resistance to authority and feudalism. Additional control: other rebellions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to state and local authority				Resistance to feudalism			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0110***	-0.1039***	–	–	-0.0043	-0.0630	–	–
	(0.0022)	(0.0320)			(0.0028)	(0.0460)		
ln Distance to current freehold land toponymy	–	–	-0.0037**	-0.1193***	–	–	-0.0010	-0.0615*
			(0.0017)	(0.0334)			(0.0015)	(0.0366)
Rebellions	0.0976***	0.0791***	0.1080***	0.0971***	0.0388***	0.0271**	0.0485***	0.0428***
	(0.0093)	(0.0110)	(0.0072)	(0.0077)	(0.0083)	(0.0113)	(0.0061)	(0.0066)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	35785	35785	19433	19433	35785	35785
R^2	0.054		0.051		0.019		0.014	
$F-stat$		17.839		20.281		17.839		20.281

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Rebellions is a binary variable which is equal to one if at least one other type of rebellion took place in the municipality. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level. Standard errors are clustered at the district level.

Table A36: Freehold land and anti-feudal rebellions during the Revolution, 1789-1792

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Resistance to feudalism							
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0050*	-0.0367	–	–	–	–	–	–
	(0.0027)	(0.0419)						
ln Distance to current freehold land toponymy	–	–	-0.0004	-0.0330	–	–	–	–
			(0.0012)	(0.0333)				
Historical freehold land toponymy	–	–	–	–	0.0123***	0.1505	–	–
					(0.0045)	(0.1849)		
Current freehold land toponymy	–	–	–	–	–	–	0.0009	0.1977
							(0.0030)	(0.2001)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	35785	35785	19837	19837	35785	35785
R^2	0.015		0.004		0.013		0.004	
$F-stat$		20.358		21.148		18.516		31.430

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to feudalism is a binary variable which is equal to one if at least a rebellion against feudalism took place in the municipality at stake. Historical freehold land toponymy is a binary variable which are equal to one if the historical toponymy of the municipalities refers to freehold land (CTHS, 2020). The current toponymy variable is the exact equivalent, but relying on the current toponymy of the municipality only (CDIP, 2006). Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A37: Freehold land and anti-feudal rebellions. Exclusion of the Revolution period, 1789-1792

	(1)	(2)	(3)	(4)
	Resistance to feudalism			
	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0011	-0.0439***	–	–
	(0.0011)	(0.0135)		
ln Distance to current freehold land toponymy	–	–	-0.0017	-0.0504***
			(0.0010)	(0.0147)
Distance controls	X	X	X	X
Land controls	X	X	X	X
Observations	19433	19433	35785	35785
R^2	0.002		0.002	
$F - stat$		20.358		21.148

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Resistance to feudalism is a binary variable which is equal to one if at least a rebellion against feudalism took place in the municipality at stake. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

D.2 Democratisation and Democratic Consolidation During the 19th Century

Table A38: Freehold land and electoral support for the Republicans during the Second Republic. Toponyms reported before 1789 or before 1848

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Second Republic elections				Third Republic elections			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy (1789)	-0.0342*	-1.9123**	–	–	-0.0188	-0.4982*	–	–
	(0.0196)	(0.7812)			(0.0145)	(0.2629)		
ln Distance to historical freehold land toponymy (1848)	–	–	-0.0507***	-1.4979***	–	–	-0.0154	-0.3959**
			(0.0178)	(0.4841)			(0.0141)	(0.1904)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	17201	17201	17201	17201	18282	18282	18282	18282
R^2	0.072		0.075		0.114		0.114	
$F-stat$		7.615		12.834		9.019		14.729

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: In columns (1), (2), (5) and (6), the distance to the historical freehold land toponymy is computed using only the toponyms reported before 1789. In columns (3), (4), (7) and (8), this distance is computed using the toponyms reported before 1848. The Second Republic elections considered are the legislative elections of 1848, 1849 and the presidential election of 1848. The Third Republic elections considered are the legislative elections of 1876, 1881, 1885 and 1889. For both periods, the support for the Republicans is measured as the log of the Republican share of votes. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A39: Freehold land and electoral support for the Republicans during the Second Republic

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Second Republic: w/o 1848 presidential				Second Republic: w/o 1848 legislative			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0692***	-1.2122***	–	–	-0.0154***	-0.2573***	–	–
	(0.0171)	(0.3181)			(0.0039)	(0.0682)		
ln Distance to current freehold land toponymy	–	–	-0.0023	-1.9267***	–	–	-0.0002	-0.4110***
			(0.0112)	(0.5028)			(0.0024)	(0.1074)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	17201	17201	30991	30991	17201	17201	30991	30991
R^2	0.076		0.055		0.073		0.053	
$F-stat$		17.795		18.311		17.795		18.311

Standard errors in parentheses

* $p<0.1$, ** $p<0.05$, *** $p<0.01$

Source: See main text.

Notes: The Second Republic elections considered are the legislative elections of 1848 and 1849 from column (1) to (4), the legislative election of 1849 and the presidential election of 1848 from column (5) to (8). For both sets of elections, the support for the Republicans is measured as the log of the Republican share of votes. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A40: Freehold land and electoral support for the Republicans during the Second Republic

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	1848 - Legislative				1849 - Legislative				1848 - Presidential			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0563***	-1.0209***	–	–	-0.0836***	-1.4243***	–	–	-0.0567**	-1.4106***	–	–
	(0.0154)	(0.2792)			(0.0195)	(0.3683)			(0.0230)	(0.4541)		
ln Distance to current freehold land toponymy	–	–	0.0035	-1.6200***	–	–	-0.0089	-2.2763***	–	–	0.0297	-2.2827***
			(0.0105)	(0.4387)			(0.0124)	(0.5826)			(0.0197)	(0.6955)
Distance controls	X	X	X	X	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X	X	X	X	X
Observations	17201	17201	30991	30991	17201	17201	30991	30991	17201	17201	30991	30991
R^2	0.072		0.051		0.079		0.060		0.100		0.073	
$F-stat$		17.795		18.311		17.795		18.311		17.795		18.311

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: The support for the Republicans is measured as the log of the Republican share of votes. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A41: Freehold land and electoral support for the Republicans during the Third Republic

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	1876				1881				1885				1889			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical	-0.0395	-0.8161*	–	–	-0.0200	-0.4064**	–	–	-0.0365***	0.0286	–	–	-0.0230	-0.5568*	–	–
freehold land toponymy	(0.0322)	(0.4701)			(0.0155)	(0.1976)			(0.0125)	(0.1522)			(0.0197)	(0.3201)		
ln Distance to current	–	–	-0.0214	-2.2436*	–	–	-0.0037	-1.4456**	–	–	0.0054	-0.5220	–	–	0.0130	-2.5798**
freehold land toponymy			(0.0297)	(1.1455)			(0.0157)	(0.6349)			(0.0118)	(0.3438)			(0.0189)	(1.1948)
Distance controls	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Observations	18077	18077	33703	33703	17863	17863	33182	33182	18192	18192	33769	33769	18110	18110	33768	33768
R^2	0.095		0.060		0.103		0.084		0.057		0.055		0.077		0.065	
$F-stat$		17.829		8.512		18.110		7.788		17.839		8.590		16.168		7.947

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: All elections considered are legislative elections. The support for the Republicans is measured as the log of the Republican share of votes. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A42: Freehold land and electoral support for the Republicans. 19th-century control variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Second Republic elections				Third Republic elections			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0614***	-1.1751***	–	–	-0.0232*	-0.2825*	–	–
	(0.0167)	(0.3048)			(0.0129)	(0.1519)		
ln Distance to current freehold land toponymy	–	–	0.0093	-1.9807***	–	–	0.0008	-1.1187***
			(0.0126)	(0.5577)			(0.0107)	(0.4287)
Land controls	X	X	X	X	X	X	X	X
Population and industrial controls	X	X	X	X	X	X	X	X
Observations	16805	16805	30411	30411	18264	18264	33983	33983
R^2	0.068		0.051		0.123		0.111	
$F-stat$		21.085		17.392		21.453		10.987

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: The Second Republic elections considered are the legislative elections of 1848, 1849 and the presidential election of 1848. The Third Republic elections considered are the legislative elections of 1876, 1881, 1885 and 1889. For both periods, the support for the Republicans is measured as the log of the Republican share of votes. Land controls include: ruggedness, wheat suitability, potato suitability and the surface area of municipalities while population and industrial controls include the population level and the number of industrial factories. The population in 1846 is used as a control for the Second Republic estimations while the population in 1881 is used as a control for the Third Republic estimations.

Table A43: Freehold land and electoral support for the Republicans. Additional control: the share of constitutional clergy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Second Republic elections				Third Republic elections			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0654***	-1.2772***	–	–	-0.0263**	-0.3163**	–	–
	(0.0173)	(0.3346)			(0.0121)	(0.1544)		
ln Distance to current freehold land toponymy	–	–	0.0033	-2.1530***	–	–	-0.0025	-1.0137**
			(0.0119)	(0.5517)			(0.0104)	(0.4066)
Constitutional clergy	-0.1769***	-0.0746	-0.1324***	-0.1561	0.1841***	0.2184***	0.1780***	0.2708***
	(0.0640)	(0.1157)	(0.0362)	(0.1108)	(0.0582)	(0.0715)	(0.0397)	(0.0630)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	17201	17201	30991	30991	18178	18178	33111	33111
R^2	0.099		0.074		0.141		0.124	
$F-stat$		18.299		18.508		17.637		10.967

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: The Second Republic elections considered are the legislative elections of 1848, 1849 and the presidential election of 1848. The Third Republic elections considered are the legislative elections of 1876, 1881, 1885 and 1889. For both periods, the support for the Republicans is measured as the log of the Republican share of votes. The constitutional clergy corresponds to the clergy who agreed to sign the Civil Constitution of the clergy during the Revolution in France. The log of its share is reported in the estimations. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A44: Freehold land and electoral support for the Republicans. Additional control: the or the percentage of *émigrés* during the Revolution

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Second Republic elections				Third Republic elections			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0745***	-1.9218***	–	–	-0.0177	-0.3297	–	–
	(0.0168)	(0.6675)			(0.0125)	(0.2150)		
ln Distance to current freehold land toponymy	–	–	-0.0064	-3.5403***	–	–	0.0036	-1.5686**
			(0.0122)	(1.2062)			(0.0112)	(0.6967)
Percentage of *émigrés*	0.0781	0.3716**	0.1300***	0.5795***	-0.0524	-0.0003	-0.0169	0.0720
	(0.0488)	(0.1573)	(0.0307)	(0.1845)	(0.0374)	(0.0582)	(0.0250)	(0.0567)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	16968	16968	30565	30565	18178	18178	33394	33394
R^2	0.096		0.089		0.123		0.102	
$F-stat$		9.464		8.767		10.261		6.376

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: The Second Republic elections considered are the legislative elections of 1848, 1849 and the presidential election of 1848. The Third Republic elections considered are the legislative elections of 1876, 1881, 1885 and 1889. For both periods, the support for the Republicans is measured as the log of the Republican share of votes. The percentage of *émigrés* stands for the share of people having emigrated from France during the Revolution. The log of this percentage is reported in the estimations. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A45: Freehold land and electoral support for the Republicans during the Third Republic. Additional control: taxes per capita

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	1876				1881				1885				1889			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical	-0.0607*	-1.5139*	–	–	-0.0197	-0.4045**	–	–	-0.0339***	0.1689	–	–	-0.0347	-0.7544*	–	–
freehold land toponymy	(0.0334)	(0.8258)			(0.0154)	(0.2031)			(0.0125)	(0.3206)			(0.0219)	(0.3995)		
ln Distance to current	–	–	-0.0432	-3.4414*	–	–	-0.0065	-1.6259**	–	–	0.0043	-0.7048	–	–	-0.0092	-2.9001*
freehold land toponymy			(0.0277)	(1.8767)			(0.0155)	(0.7439)			(0.0112)	(0.5392)			(0.0159)	(1.5168)
Taxes per capita - 1876	0.2008	0.5151**	0.2969***	0.7866**	–	–	–	–	–	–	–	–	–	–	–	–
	(0.1324)	(0.2608)	(0.1040)	(0.3176)												
Taxes per capita - 1881	–	–	–	–	-0.0128	-0.0016	0.0441	0.1696*	–	–	–	–	–	–	–	–
					(0.0246)	(0.0353)	(0.0307)	(0.0980)								
Taxes per capita - 1885	–	–	–	–	–	–	–	–	-0.0233	-0.0972	0.0147	0.1481	–	–	–	–
									(0.0393)	(0.1287)	(0.0310)	(0.1170)				
Taxes per capita - 1889	–	–	–	–	–	–	–	–	–	–	–	–	0.1237	0.2803***	0.2458***	0.7812**
													(0.0801)	(0.1049)	(0.0710)	(0.3179)
Distance controls	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Observations	18077	18077	33703	33703	17863	17863	33182	33182	18192	18192	33769	33769	18110	18110	33768	33768
R^2	0.103		0.074		0.104		0.087		0.058		0.055		0.084		0.084	
$F-stat$		9.510		5.209		16.318		6.718		4.390		4.905		12.560		6.537

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: All elections considered are legislative elections. The support for the Republicans is measured as the log of the Republican share of votes. The logs of per capita taxes are added as an additional controls in the estimations. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A46: Decisions and sanctions made towards the people prosecuted after the 1851 coup

Original Typology	Typology in English	Observations	Percent
Affaire classée	Case closed	12	0.05
Algérie	Algeria	110	0.45
Algérie moins	Algeria minus	4837	19.82
Algérie plus	Algeria plus	4228	17.33
Cayenne	Cayenne	226	0.93
Colonie pénitentiaire	Prison colony	1	0.00
Conseil de guerre	Court-martial	224	0.92
Eloignement	Removal orders	482	1.98
Exil temporaire	Temporary deportation	2	0.01
Expulsion	Deportation	924	3.79
Internement	Imprisonment	2550	10.45
Juridiction ordinaire	Ordinary court	1	0.00
Liberté	Freedom	4155	17.03
Maison de correction	Detention centre	25	0.10
Non lieu	Dismissed case	509	2.09
Non statué	No decision	5	0.01
Police correctionnelle	Correctional police	618	2.53
Pénitencier en Afrique	Penitentiary in Africa	1	0.00
Renvoyé au parquet	Referred to the public prosecutor	547	2.24
Surveillance	Surveillance	4947	20.27
Total		24404	100.00

Source: See main text.

Notes: The Algeria and Cayenne decisions correspond to a deportation to these places, without more precisions added. The Algeria plus decision corresponds to being deported to Algeria and being under house arrest, while the Algeria minus one corresponds to being deported to Algeria but remaining free while there. The Ordinary court and Referred to the public prosecutor correspond to cases in which the prosecuted person was eventually set free. Correctional police means that the prosecuted person was potentially subject to a correctional sentence.

Table A47: Freehold land and resistance to the 1851 coup d'état of Napoléon Bonaparte

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Percentage of people prosecuted				Percentage of people with heavy penalty			
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0097**	-0.5376**	–	–	-0.0049**	-0.2758*	–	–
	(0.0046)	(0.2558)			(0.0024)	(0.1550)		
ln Distance to current freehold land toponymy	–	–	-0.0071*	-0.6749***	–	–	-0.0042	-0.3800***
			(0.0040)	(0.2400)			(0.0026)	(0.1459)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	18142	18142	33516	33516	18142	18142	33516	33516
R^2	0.021		0.024		0.020		0.025	
$F-stat$		20.326		20.245		20.326		20.245

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: The percentage of people prosecuted corresponds to the number of people born in a given municipality and who were prosecuted after the 1851 coup d'état, per 100 inhabitants. The percentage of people with heavy penalty is a similar variable for prosecuted people who were heavily sentenced. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A48: Freehold land and resistance to the 1851 coup d'état of Napoléon Bonaparte

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Place of residence with people prosecuted							
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
ln Distance to historical freehold land toponymy	-0.0234***	-0.5220***	–	–	-0.0095***	-0.2361**	–	–
	(0.0049)	(0.1772)			(0.0031)	(0.1013)		
ln Distance to current freehold land toponymy	–	–	-0.0119***	-0.6439***	–	–	-0.0031	-0.2706***
			(0.0044)	(0.1764)			(0.0026)	(0.0880)
Birthplace of people prosecuted	–	–	–	–	0.4459***	0.4121***	0.4639***	0.4425***
					(0.0194)	(0.0231)	(0.0154)	(0.0146)
Distance controls	X	X	X	X	X	X	X	X
Land controls	X	X	X	X	X	X	X	X
Observations	19433	19433	34994	34994	19433	19433	34994	34994
R^2	0.028		0.024		0.319		0.336	
$F-stat$		20.358		22.419		16.776		20.527

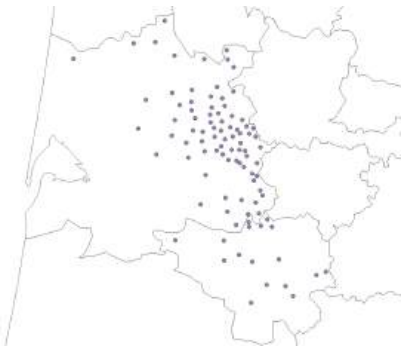
Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

Notes: Place of residence with people prosecuted is a binary variable equal to one if at least one person living in this municipality was prosecuted after the 1851 coup d'état. Birthplace of people prosecuted is a binary variable equal to one if at least one person born in this municipality was prosecuted after the 1851 coup d'état. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Districts of Bordeaux (light blue) and Bazas (dark blue)



Location of freehold land within the districts of Bordeaux and Bazas

Figure B38: Freehold land in the districts of Bordeaux and Bazas during the Middle Ages

Source: See main text.

Notes: The map of districts is for the year 1876. Each purple dot represents the location of a municipality with freehold land during the Middle Ages.

E Transmission Channels

Table A49: Resistance to authority and feudalism, political clubs and support for the Republicans

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Political clubs		Municipality with people prosecuted (1851)		Second Republic elections		Third Republic elections	
Resistance to state and local authority	0.3585***	–	0.2942***	–	0.1776***	–	0.1110***	–
	(0.0186)		(0.0189)		(0.0292)		(0.0174)	
Resistance to feudalism	–	0.1873***	–	0.1733***	–	0.0783**	–	0.0881***
		(0.0211)		(0.0190)		(0.0313)		(0.0274)
Distance controls	X	X	X	X	X	X	X	
Land controls	X	X	X	X	X	X	X	X
Observations	35785	35785	35785	35785	30991	30991	34002	34002
R^2	0.044	0.024	0.036	0.024	0.062	0.059	0.104	0.103

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: See main text.

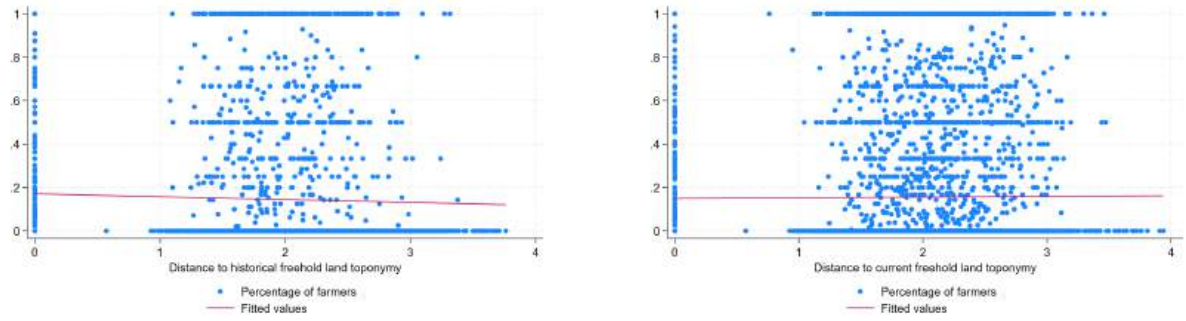
Notes: Political club is a binary variable which is equal to one if a political club was present in the municipality at stake between 1789 and 1795. Municipality with people prosecuted is a binary variable equal to one if at least one person born in this municipality was prosecuted after the 1851 coup d'état. The Second Republic elections considered are the legislative elections of 1848, 1849 and the presidential election of 1848. The Third Republic elections considered are the legislative elections of 1876, 1881, 1885 and 1889. For both periods, the support for the Republicans is measured as the log of the Republican share of votes.Resistance to state and local authority is a binary variable which is equal to one if at least a rebellion against state or local authority took place in the municipality at stake. Resistance to feudalism is the equivalent binary variable for rebellions against feudalism. Distance controls include distance to: Roman roads, waterways, universities, bishoprics and Dominican monasteries. Land controls include: freehold land law, ruggedness and wheat suitability. Standard errors are clustered at the district level.

Table A50: Typology of professional sectors for the people prosecuted after the 1851 coup

Sector	Observations	Percent
Agriculture	5,635	23.27
Industry	11,065	45.67
Administration	535	2.21
Military	132	0.55
Trade	3,059	12.63
Liberal Professions	1,728	7.14
Service	199	0.82
Transport	528	2.12
Unknown	1,337	5.52
Total	24,218	100.00

Source: see main text.

Notes: The table provides the typology of all professional sectors in which people prosecuted after the 1851 coup were working. The number of observations represent the total number of people working in a given sector.



Historical toponymy Current toponymy

Figure B39: Distance to freehold land and the percentage of agricultural workers among the people prosecuted in 1851

Source: See main text.

Notes: The log of distance to freehold land is considered. The sample is restricted to the municipalities of birth of people prosecuted after the 1851 coup.

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