

The Colonial Origins of State Capacity: Evidence from Spanish Conquerors in Latin America*

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Abstract

This paper documents a link between the colonial conquerors of specific areas in Latin America and modern development as measured by luminosity in 2010. The findings suggest that the level of education of the conqueror is a potential determinant of this link. The relationship holds when looking solely at within-country variation and when we look at spatially contiguous areas in the same country that have different conquerors. We also find evidence supporting the idea that durable investments in the organization of the state that built state capacities is the main source of persistence by looking at measures of state capacity at three different dates.

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1 Introduction

The past twenty years have seen an increased interest among economists in the long-term consequences of historical factors in shaping modern day patterns of economic development. This includes the pioneering contributions on the role of institutions as an important driver of long-run development such as [Acemoglu, Johnson and Robinson \(2005\)](#), [Engerman and Sokoloff \(2008\)](#), and [North et al. \(1990\)](#), as well as wider cultural, political, and social forces as conduits of historical persistence in economic performance.¹ Following the much-cited work of [Acemoglu, Johnson and Robinson \(2001\)](#) and [Acemoglu, Johnson and Robinson \(2002\)](#), there has been great interest in the role of colonial legacies for modern day development patterns. And it is now appreciated that there were many different features of colonial rule and these can have a lasting impact on modern day institutions and development patterns.²

Even when persistence is observed, it is important to acknowledge that patterns of institutional development are episodic. For example, single once-and-for-all transitions to democratic rule are uncommon. This is especially true in Latin America where there has been a great deal of institutional “churning” since colonial times, even with those countries that were colonized by the Spanish. So it is hard to argue that the persistence of political institutions is the most important factor in driving development patterns, particularly in the Latin American case. This has led to an increased interest in other possible sources such as cultural factors or the way that the state is organized where durable investments in state effectiveness can persist across institutional transitions.

There is already, of course a vast literature on the economic history of Latin America is vast³. Of particular relevance to this paper how institutions have shaped development patterns which is discussed, for example, in [Abad and Van Zanden \(2016\)](#), [Sokoloff and Engerman \(2000\)](#), [Haber \(1997\)](#), and [Coatsworth \(2008\)](#). Specifically, the paper explores the legacy of colonialism in Latin America by exploiting a natural experiment in the pattern of Spanish conquest using the fact that different conquerors settled in different territories with variation within and between modern day countries.

¹See, for example, [Abad, Maurer et al. \(2021\)](#), [Cantoni and Yuchtman \(2021\)](#), [Cirone and Pepinsky \(2022\)](#), [Nunn \(2014\)](#) and [Voth \(2021\)](#) for discussions and reviews.

²Such ideas have been explored in a variety of country-specific studies such as [Dell and Olken \(2020\)](#) for Indonesia, [Dell, Lane and Querubin \(2018\)](#) for Vietnam and [Iyer \(2010\)](#) for India. [Michalopoulos and Papaioannou \(2020\)](#) summarizes the evidence from Africa.

³See, for example, [Bulmer-Thomas \(2003\)](#)

There are now a number of papers that exploit historical differences in colonial institutions in Latin America with a focus on the implications for contemporary state organization and development (see, for example, [Chiovelli et al. \(2022\)](#), [Fagueta, Matajira and Sánchez \(2022\)](#), [Garfias and Sellars \(2021\)](#), [Irrarázaval et al. \(2022\)](#), and [Valencia Caicedo \(2019\)](#)). Here, we exploit the fact that different parts of Latin America were subjugated by different Spanish conquerors. The centerpiece of the paper is the construction of a new data set that matches conquerors to territories at a granular level. We argue that conquerors were largely ignorant of the characteristics of the territories that they were conquering during the earliest wave of colonization. This injected a plausible element of randomness that can be used to identify the impact of individual conquerors on subsequent development rather than it being due to “good” conquerors have appropriated intrinsically “superior” territories.

The paper has two main findings. First, after including country fixed effects, there is heterogeneity in development patterns according to the identity of the conqueror which appears to be related to his level of education. This finding is robust to including a wide variety of controls. More convincingly, it holds up when we exploit spatial variation close to borders between conqueror territories with heterogeneous education levels. Second, we show that a conqueror’s education is related to colonial, intermediate, and present-day measures of state capacity, suggesting that durable investments in the way that the state is organized are a plausible source of persistence. To reinforce this, we find little evidence of cultural consequences of conqueror identity as reflected in attitudes and no differences in modern-day education levels.

The first of these findings connects the paper to recent interest in the role of educated public servants in affecting the performance of countries that they govern, for example [Besley, Montalvo and Reynal-Querol \(2011\)](#), [Dal Bó, Finan and Rossi \(2013\)](#), and [Gagliarducci and Nannicini \(2013\)](#). The role of education could manifest itself in devising better ways of governing, securing territory, or improving the workings of the state. And the importance of leadership shown by conquerors could parallel the consistent finding that CEOs matter to the performance of their firms such as [Bertrand and Schoar \(2003\)](#).

The second finding relates to the increasing recognition that state capacity can be an important source of historical persistence; see, for example, [Voth \(2021\)](#) and [Xu \(2019\)](#).⁴ Debates about

⁴For discussions of the Latin American context, see [Cárdenas \(2010\)](#) and [Geddes \(1994\)](#).

the role of state capacity started with work by political and economic historians who focused, in particular, on the state's capacity to raise revenue. Much of this literature, linked the development of tax systems to the desire for military success and regard it as a key determinant of the successful development of nation states (see, for example, [Hintze and Gilbert \(1975\)](#), [Tilly \(1992\)](#), or [Brewer \(2002\)](#)). [Dincecco and Katz \(2016\)](#) developed these ideas by looking at the fiscal history of early modern Europe. Political scientists such as [Levi \(1989\)](#) and [Migdal \(1988\)](#) have also stressed the political factors that have shaped effective states. [North et al. \(2009\)](#) and [Besley and Persson \(2011\)](#) have stressed the need to create a viable social order that limits violence.

The literature has now moved on from an exclusive focus on building tax systems and the term “state capacity” is now used more broadly to encompass the wider set of investments needed to make the state work effectively.⁵ Unlike standard physical infrastructure, state capacities often reflect non-tangible investments in organizational capability and strategic design to improve the way that the state functions. For example, it includes organizing the collection of taxes through building systems of compliance and training public officials. It also includes rudimentary aspects of legal systems used to project power by building systems for appointing judges and designing court systems. What creates persistence is the fact that many such investments are durable and depreciate only slowly, if at all. As stressed in [Besley and Persson \(2009\)](#), there are also complementarities between state capacities so that building capacities in one area can facilitate investments elsewhere. For example, a stronger legal and tax system tend to support one another and the development of markets.

The remainder of the paper is organized as follows. The next section discusses the historical background and context. Section three discusses data collection. In section four, we present the core empirical findings. Section five considers a “spatial contiguity” design for a sub-group of countries, with a particular focus on Mexico. In section six, we discuss three sources of persistence: state capacity, education, and trust. Section seven concludes.

⁵See [Besley and Persson \(2011\)](#), [Dincecco \(2017\)](#), and [Savoia and Sen \(2015\)](#) for reviews of the main ideas.

2 The Early Conquests of *Las Indias*

The territorial expansion of the urban areas settled by Spanish conquest lay between Zacatecas in northern Mexico and Buenos Aires and took place over 50 years.⁶ The conquerors who came founded cities across a large area with diverse geographies, climate, and indigenous cultures. The judgement of each conqueror played a key role with only loose guidance being handed down by the king, stating that land should be suitable for settlement with ready access to drinking water, proximity to construction materials, and cultivable land.

Conquests were organized by military groups known as *Hueste Conquistadora*, or simply *Hueste*, which typically operated under a license granted to the Conqueror who was traditionally the leader of the group.⁷ The other members of the *Hueste* were largely armed volunteers. Even though they were not essential for a *Hueste*, it was common for each expedition to be authorized in a document called a *capitulación* granted by the Castilian kings who sought to maintain political control over the colonial territories known as *Las Indias*. No one was allowed to conquer territories without specific authorization from the King.

The early period of conquest (the first 50-60 years) has some randomness in settlement patterns by conqueror identity. This partly reflects the fact that conquerors faced huge *ex ante* uncertainty around the characteristics of the territories that they were conquering.⁸ Although each primary conqueror had a *capitulación*, signed between the Conqueror and the King, these tended to include only general information based on the latitude and longitude rather than detailed features of the territory in question. Thus, as Bernardo García Martínez notes (Martínez, 1970):

“sometimes the conqueror was successful in hiring for a particularly rich place and was successful in obtaining the kind of grants that were particularly profitable in the land where he went; but instead he sometimes failed, signing a contract

⁶See Montalvo and Reynal-Querol (2021) for a detailed historical account about how the Spanish conquest took place.

⁷See Ballesteros Gaibrois (1985).

⁸This argument is further reinforced by reading the “Manual of Indian Law” (Dognac Rodríguez, 1994) which provided the legal guide for Castilian expansion in America. From the outset, conquest, discovery, and settlement were all conceived as part of the same process. Lockhart et al. (1976) note that “Since conquest and settlement were one single ongoing process in Spanish America, we are little reluctant to emphasize the distinction between them....yet only in this way we can illustrate to what extent the conquerors were acting like immigrants, businessman and settlers.”

and compromising his fortune to launch himself to the conquest of some "very rich island" that only existed in his imagination, or to rescue the gold submerged in a mysterious lagoon.

The kings, on the other hand, could not lose anything, because the seats were notoriously unequal as they put the risk and the work in the hands of the conquerors. These had to make a large outlay and maintain their strength until the company was achieved. Some real help they received - money or a little money - was insignificant. If the company failed, the Crown did not have to give the unfortunate conqueror anything or compensate him in any expense, since he had not fulfilled his commitment to conquer. On the other hand, if fortune was presented and the Crown had to pay the agreed prize, it also lost nothing because it paid with a percentage of what the conqueror earned for her and not with his original resources, as if it were of a tax on what was obtained in a lottery."

The claim that much assignment of land was largely arbitrary is also confirmed by examining the pattern of settlement where the original map of the *capitulaciones* is based on a series of straight lines with highly heterogeneous characteristics. Knowledge of the geography was rudimentary. For example, some areas are designated simply in terms of proximity to the Pacific ocean. It was not until 1571 that the Spanish authorities sent Lopez de Velasco, a cosmographer and chronicler, to properly document the territories that had been conquered. In the early period, therefore, risks were largely borne by individual conquerors rather than the King.⁹

3 Data

3.1 Conquerors

We use [Morales Padrón \(1988\)](#) to get a comprehensive list of the main early conquerors, together with the regions that they explored and the routes that they took. Of the 107 conquerors listed in [Morales Padrón \(1988\)](#), we only classify 85 as having conquered territories in what is now Spanish speaking Latin American. This excludes, for example, conquerors who

⁹This was documented in "Geografía Universal de Las Indias 1573", by [Lopez de Velasco \(1573\)](#).

conquered the Philippines, Florida, and territories in modern day Brazil. We also exclude those who led sea expeditions in search of the western passage since they did not head inland and had almost no contact with the indigenous populations.

Following the information in [Montana \(1943\)](#), we classify conquerors by the geographical area that they conquered across several areas: Río de la Plata, Chile, Peru, Colombia, Venezuela, Mexico, Guatemala, Honduras, Castilla del Oro, Cuba, Hispaniola, Puerto Rico, and Jamaica. We establish the relative importance of each conqueror to a region using [Montana \(1943\)](#) and [García Martínez \(1970\)](#).¹⁰ It also details whether two different conquerors fought for control of a given territory. [García Martínez \(1970\)](#) gives information on the authority of conquerors, for example, the *capitulaciones* which granted them formal rights over an area.

We focus on the *Principal Conquerors*, i.e. those that were responsible for undertaking the conquest of a particular region and who normally have a *capitulación*. This requires a careful analysis of each case and, in some instances, exercising judgement. For example, we exclude from the list of Principal Conquerors, those that cannot be linked (directly or indirectly) to the foundation of a territory.¹¹ However, signing a *capitulación* is neither necessary nor sufficient to be classified as a Principal Conqueror.

It is not sufficient since we focus on those conquerors who have participated in the conquest and have exercised power over the territory. Hence, we exclude those who led an expedition planned under a *capitulación* which did not occur and/or was unsuccessful. For example, Pedro de Alvarado signed a *capitulación* for “Mar del Sur de la Nueva España” in 1532. However, his expedition failed since it clashed with the expedition of the successful conqueror of that area, Francisco Pizarro.

Signing a *capitulación* is also not a necessary condition since, in some cases, a conqueror formed a partnership with the signatory of the *capitulación* and only later became the head of the expedition. A case in point is the *capitulación* signed by Pedro Sánchez de Hoz for Chile in 1539 but implemented by Pedro de Valdivia.¹² We also take account of the fact that in some cases the *capitulación* was inherited.¹³ For example, the Welser family of German bankers and Nicolás de Ovando are in the list of principal conquerors even though they do

¹⁰We exploit the fact that [Montana \(1943\)](#) gives an account of each individual conquest which can be used to establish whether or not a conqueror acted autonomously.

¹¹See cases 5 and 6 in the Historical Appendix.

¹²See case 7 in the Historical Appendix.

¹³As [Montana \(1943\)](#) notes, Diego Colón inherited the *capitulación* from his father, Cristóbal Colón.

not appear in the list provided by Morales Padrón (1988). They led the conquest of different regions using their authority.¹⁴ Finally, there are cases in which the conqueror of a region acted without a *capitulación*, but with an instruction that had similar force as a *capitulación*. Hernán Cortés, who rebelled against Diego de Velázquez, is an example of this.

Using these classification rules, gives a list of 25 Principal Conquerors given in Table 1.

Table 1 about here

3.2 Conqueror Characteristics

We use two main sources of information on these Principal Conquerors: the *Real Academia de la Historia* (RAH, 2018) and the *Diccionario Histórico* (Bleiberg, 1979). They give information on the conqueror’s education prior to going to the *Las Indias*. We also collect the social status of their families in Spain, their age at arrival in *Las Indias*, and their place of birth in Spain.

Based on this, we classify a conqueror’s educational attainment into one of three categories: (i) *Illiterate or Basic Literacy*: the conqueror could not read and write or lacked a formal education; (ii) *Technical and/or Numerical Skills*: the conqueror was as a banker or had another occupation which required basic skills such as officers of the *Casa de Contratación* including *escribanos*, *tesoreros*, *contadores*, or *factories*; (iii) *Highly Educated*: the conqueror studied at a university.

It is useful to give a few illustrative examples.¹⁵ Francisco Pizarro is classified as illiterate based on our sources, as is Pedro de Mendoza, who was a page in the Royal Court. Domingo de Irala is in the second category since he received a formal education and had a career as an *escribano* before becoming a captain for Mendoza. Hernán Cortés has the highest educational attainment level since he was sent to Salamanca by his family to study law.

We also construct a “social status” variable where we classify conquerors in three categories depending on family history *before* their conquest. It is important to do this beforehand as

¹⁴For example, the Welser signed a *capitulación* to conquer regions in contemporary Colombia and Venezuela. In order to establish their territory, they sent several representatives: Alfinger, Federmann, and Spira. Chroniclers, and Morales Padrón (1988) in this case, have considered these representatives as being responsible for the conquest. However, the Welser family clearly had the authority to formulate and apply laws and regulations.

¹⁵Further details are in the Appendix.

many became nobles or wealthy as a consequence of their conquests. Our status variable is equal to zero if the conqueror's family had no noble titles, including being from a peasant background. It takes a value of one for *hidalgos*, i.e. the lower nobility and merchants. It takes a value of two for the aristocracy, high nobility or economic elites (such as the Welser family). This information comes from the biographies of conquerors contained in the *Real Academia de la Historia* (RAH, 2018).

After assembling this information, we have no education data on 7 out of the 25 principal conquerors. Although this is roughly a quarter of all the conquerors, it only represents 6.8 percent of the total territory that we cover. We also lose 2 out of the 25 by not being able to classify their social status (one of these also has missing education data).

The data on the core sample of Principal Conquerors is in Table 2.

Table 2 about here

3.3 Assigning Conquerors to Territories

The Spanish conquest in Latin America was based on founding cities that created urban centers. We link a city to a specific conqueror if it was founded during or just after the conqueror was active in the region. For example, Buenos Aires is not assigned to Pedro de Mendoza but to Juan de Garay since the initial foundation by Mendoza was not sustained over time and abandoned by him, together with all the southern region of Río de la Plata. Hence, his expedition failed and control over the territory was lost. The region was later conquered again by Juan de Garay. The opposite is true of the city of La Navidad in La Española. Even though it was abandoned and its population transferred, the ruler of La Española was already controlling the region and implementing his rule. If a city was founded by a conqueror, he would have had some control over it.

To establish which cities are associated with which conqueror, we use the biography of the conqueror from Montana (1943) along with *Diccionario de la Historia de España* (Bleiberg, 1979), which also contains biographies of the main conquerors. There is a risk that this procedure could miss those cities that were not directly founded by one of our conquerors or not prominent enough to be included in the main narrative/dictionary entries. To mitigate this risk, we extracted all cities founded during 1492 to 1580 (which covers the two waves

of colonization) from [De Terán \(1997\)](#). We then read the history of each city (in [Lopez de Velasco \(1573\)](#) and Internet sources) to establish the name of the founder. In some cases, the city was directly founded by one of our conquerors. However, in others, it was founded by another individual who could be linked to a conqueror in our list because he acted on the orders of the conqueror or served as a member of his expedition. In such cases, the city is assigned to the conqueror in our list.

In total, we have 138 cities founded under the influence and/or control of our 25 Principal Conquerors between 1492 (La Navidad) and 1580 (Buenos Aires). Sometimes these 25 principal conquerors delegated the conquest of a particular place to what we refer to as a “Secondary Conqueror”. This will be explored further in section 4.5 below where we show that including characteristics of such Secondary Conquerors does not affect the analysis.

To define the territory controlled by each conqueror (or territory under his influence) and its borders, we divide all land into $1\text{km} \times 1\text{km}$ cells and assign the closest city to the segment among the 138 cities founded between 1492 and 1580, based on minimum distance. We then merge all the areas associated with a given conqueror to obtain “polygons” representing areas of influence. To show all the territorial areas under a conqueror’s influence, we consider those areas located within a distance of 700 km from a city as depicted in panel (a) of [Figure 1](#). However, since we focus on the early period of initial colonization, our empirical findings restrict this to a smaller area of influence, those that lie within 250 km of a city during the first wave of colonization. Our focus is only on these areas and therefore the impact of the earliest waves of conquest, as shown in panel (b) of [Figure 1](#).

[Figure 1](#) about here

4 Core Findings

We now explore whether the identity of the Principal Conqueror of a territory is correlated with subsequent development patterns. We also consider whether characteristics of the conquerors, particularly their education levels, can explain differences in development patterns using fine-grained sub-national differences.

The results are based on dividing the land area in Latin America into grid-cells of $20\text{km} \times 20\text{km}$,

focusing on those cells that are at least 250km from the early conqueror foundations as in panel (b) of Figure 1. For each cell, we calculate the log of luminosity per capita in 2010 using satellite data. This follows a long literature, following [Chen and Nordhaus \(2011\)](#), which finds that luminosity has informational value for countries, regions, and areas with poor quality or missing data.¹⁶

4.1 Identification

As noted above, our focus on the early period of colonization, exploits a plausible degree of randomness in the patterns of conquest due to limited knowledge at the time. One way to assess whether this is reasonable is to relate observable dimensions of territorial quality to characteristics of conquerors which we do in Table 3. It shows that observable measures of geography, climate, and characteristics of indigenous groups are uncorrelated with the education level of the Principal Conqueror of the territory.

Table 3 about here

But we will also subject our results to a battery of robustness checks and ways of estimating the consequences of Conqueror identity. Initially, we will use data from all of the areas shown in panel (b) of Figure 1. But then we home in on areas close to the borders between different Conquerors which we will refer to as a “spatial contiguity design”.

4.2 Do Conquerors Matter?

We begin by exploring whether conqueror identities matter by looking at spatial differences between areas that were conquered by different Principal Conquerors. Following the literature on whether CEO’s matter, we try to establish whether, after controlling for area characteristics and country fixed effects, there is a role for the identity of the Principal Conqueror in explaining patterns of economic development as captured by luminosity. To do so, we estimate the following regression model:

¹⁶For similar reasons, luminosity has been used by [Thoenig, Rohner and Zilibotti \(2011\)](#), [Michalopoulos and Papaioannou \(2013\)](#), and [Michalopoulos and Papaioannou \(2014\)](#), among others. Several papers have found a positive correlation between luminosity and GDP at the country level.

$$luminosity_{ijk} = \alpha_k + \beta X_{ijk} + Conq_j + \epsilon_{ijk}, \quad (1)$$

where the outcome variable, $luminosity_{ijk}$, is log of luminosity per capita in cell i , conquered by j in country k and is obtained from the National Oceanic and Atmospheric Administration. We include country fixed-effects, α_k , to control for differences in history, policies and institutions at a country level. An additional array of controls, X_{ijk} , are included to capture differences at the grid-cell level. Population is obtained from *Landscan*. For geography, we include latitude, distance to the sea and the average ruggedness and elevation. We control for climate using precipitation and temperature, soil quality, caloric suitability, and whether malaria is endemic in the grid-cell.¹⁷ The key variables of interest are the conqueror fixed effects, $Conq_j$, and we will test whether they are jointly significant as test for whether conqueror identities matter. Standard errors in [1](#) are clustered at the conqueror level.

Table [4](#) reports results for a range of different specifications where we vary the controls that are included. In Column (1), we include only country fixed effects, adding as we proceed across the columns: geographic controls (Column 2), climate controls (Column 3), distance to the coast (Column 4), and environment controls (Column 5). Across the board, the conqueror fixed effects are strongly significant. Taking Column (5), for example, an F-test for the joint significance of the conqueror fixed effects gives: $F(17, 24) = 9986.15$. This suggests that the identity of the Principal Conquerors are a source of statistically significant differences in subsequent economic development patterns.

Table [4](#) about here

To explore which characteristics of conquerors matter, we also follow the approach of [Bertrand and Schoar \(2003\)](#) by correlating the Conqueror fixed effects with observable characteristics. To do so, we run the following regression:

$$Conq_j = \alpha + \beta Y_j + \epsilon_j, \quad (2)$$

where $Conq_j$ are the estimated conqueror fixed effects from [\(1\)](#) and Y_j contains a conqueror's education, social status, the year of the first city founded by the conqueror, and their place of

¹⁷A full set of data sources can be found in the Appendix.

origin in Spain.¹⁸

Table 5 summarizes the results from estimating (2). Column (1) includes only education and shows that it is a statistically significant predictor of the conqueror fixed effects. In Column (2), we add a control for the year of the first city founded by the conqueror and show that the significance of education remains. Column (3) adds the conqueror’s place of origin in Spain, while Column (4) includes the age at which the conqueror first arrived in *Las Indias*, and Column (5) adds the conqueror’s social status.¹⁹

Based on the (albeit limited) range of variables that we have collected, Table 5 is highly suggestive that the education level of the conqueror is a strong predictor of subsequent economic development in the territories that they conquered. We now explore this idea further in a range of specifications.

Table 5 about here

4.3 The Importance of Conqueror Education

Following the findings in Table 5, we explore the importance of education directly by using the following specification:

$$luminosity_{ijk} = \alpha_k + \beta X_{ijk} + Y_j + \epsilon_{ijk} \quad (3)$$

where, as above, $luminosity_{ijk}$ is the log of luminosity per capita in cell i , conquered by j in country k as measured in 2010. The control variables, X_{ijk} , are also as above. Again, we include country fixed effects, α_k with standard errors being clustered at the conqueror level. Concerns about spatial correlation mean that, for all of the results, we report Conley (1999)’s standard errors using a distance cutoff of 1 degree (approximately 110km measured at the equator). In place of a conqueror fixed effect, we include the conqueror characteristics from Table 5, Y_j as right hand side variables.

The results are presented in Table 6. All variables, other than the dummy variables for high education, social status, and place of origin are standardized to have a mean of zero and

¹⁸We follow Bertrand and Schoar (2003) in weighting each observation by the inverse of the standard error of the dependent variable, $Conq_j$, estimated in (1).

¹⁹Education remains significant if we also control for geography and climate.

unit standard deviation. This makes comparison and interpretation of magnitudes more straightforward. In Column (1) we find that regions whose first conqueror was highly educated have a (log of) luminosity per capita that is 0.7 standard deviations higher than those without a highly educated principal conqueror on average. A better way to get a handle on the magnitude is to note that this effect is similar in magnitude to being 2418km nearer to the coast.

The finding that having a highly educated conqueror is correlated with subsequent development is robust to excluding the two most well-known conquerors, Pizarro (low education) in Column (2) and Cortés (highly educated) in Column (3). As an additional robustness check, Column (4) includes the length of tenure of the conqueror over the territory and finds that the coefficient on education becomes even larger.²⁰ Finally, in Column (5), we decompose education into three sub-categories, finding that the highest educational attainment category appears to be driving the result. That is, Table 6 is consistent with the finding in Table 5 that having a highly educated conqueror is associated with higher per capita income in 2010.²¹

As a precursor to the spatial contiguity design developed below, Column (6) restricts the analysis to Mexico, Honduras, and Nicaragua, while Column (7) includes only Mexico. We find that the results hold up in this more restricted sample of countries.

Table 6 about here

4.4 Adding Controls for Precolonial Institutions

We now check whether the results in Table 6 are driven by more educated conquerors deciding to settle in lands where existing indigenous groups had more or less developed social and political structures in place prior to the arrival of conquerors since these could have had a long-lasting independent effect on subsequent development. In Table 7, we therefore include a range of variables that capture features of precolonial settlements and societies. We include these variables in addition to the controls included in Table 6.

²⁰The results are robust if we use the period of influence over the territory, which is defined as the number of years from the conqueror's first foundation to the end of political influence (considering the period in which members of his family or *hueste* were in rule), rather than the tenure period.

²¹Table A.2 in the Appendix shows that the results in Table 6 are robust to using a more aggregated classification for the place of origin of the conqueror.

A simple and popular way of capturing this is to include precolonial population density using data from [Maloney and Valencia \(2016\)](#). This idea is used in [Acemoglu, Johnson and Robinson \(2002\)](#) who argue that more densely populated countries are likely to have had more developed precolonial societies. Column 1 of Table 7, includes this and shows that precolonial development measured this way does have a positive and significant correlation with luminosity per capita in 2010. However, the coefficient on conqueror’s education remains positive, statistically significant, and of a similar size to what we found in the core specification.

A second way to capture precolonial development is include the hierarchy variables available from the Ethnographic Atlas of [Murdock \(1959, 1967\)](#). This follows recent papers that have shown that pre-colonial political centralization is an important determinant of development ([Gennaioli and Rainer \(2007\)](#), [Michalopoulos and Papaioannou \(2013\)](#)). Political centralization is usually captured by using the measure of jurisdictional hierarchy beyond the local community. Such measures have mostly been used in research on Africa and the available data for ethnic groups in Latin America is more patchy. To include it, we mapped the settlements onto the Murdock Map for Latin America which required us to geo-reference the distribution of native groups using [Murdock \(1951, 1960\)](#). We then collected information on the characteristics of ethnic groups by matching their names as they appear in the Murdock map with the names that appear in the Ethnographic Atlas. Where we found a match, we can then extract information about the jurisdictional hierarchy level from the Ethnographic Atlas when it is available.²²

The results which include these jurisdictional hierarchy variables are presented in Columns (2) and (3) of Table 7. Column (2) only includes the hierarchy variable while, in Column (3), we also include precolonial population density as in Column (1). The hierarchy variable is not correlated with luminosity per capita in 2010 and including it does not affect the size, sign, nor significance of the conqueror’s education.

²²We follow the literature in using the number of hierarchies or jurisdictional levels beyond the local community as a measure of state development (variable v33 in the Ethnographic Atlas). This gives the number of jurisdictional levels beyond the local community, with 1 representing the theoretical minimum (e.g., none/autonomous bands or villages) and 4 representing the theoretical maximum (e.g., villages nested within parishes, districts, provinces, and a complex state). This variable also provides a measure of political complexity, ranging from 1 for stateless societies, through 2 or 3 for petty and larger paramount chiefdoms or their equivalent, to 4 or 5 for large states. For cases with missing information after matching or where matching was not possible, we collected information on the level of state development using the original sources and following the same definition as in the Ethnographic Atlas. See the Online Appendix for further details.

As a third control for precolonial structures, we use archaeological evidence on precolonial temples using data from [Mayshar, Moav and Pascali \(2020\)](#) which reports the number of temples in each area.²³ The results from including this are in Columns (4) and (5) of Table 7. It is interesting to note that precolonial temples are correlated with contemporary development as captured by luminosity, consistent with some persistence in settlement patterns. Moreover, this is robust to also controlling for population density, as per Column (5). However, as in the rest of the table, the correlation with conqueror’s education is robustly positive and of similar magnitude.

Taken together, the findings in Table 7 suggest that, although there may indeed be some persistence from precolonial indicators of development, the educational level of the Principal Conqueror remains correlated with the pattern of contemporary development.

Table 7 about here

4.5 Secondary Conquerors

We further test the robustness of the results by adding a wider group of what we call *Secondary Conquerors* which also includes captains who were granted authority to conquer and rule a territory assigned to another conqueror. Their powers did not, therefore, emerge directly from the King but indirectly via another conqueror, who in most cases held a *capitulación*. Many secondary conquerors were, nonetheless, powerful in their own right, even though they were under the authority of a Principal Conqueror as we have defined them.²⁴ In many cases, the main captain operating with the authority of a Principal Conqueror discovered new lands and attempted to rule them without oversight from his superior and, in some cases, they were successful and signed their own *capitulación* with the King, leading to them being classified as Principal Conquerors. For example, Sebastián de Belalcázar participated in the conquest of Ecuador, serving as a captain of Francisco Pizarro. Subsequently, Belalcázar conquered the region of Popayán and was granted a *capitulación*. He is therefore a Principal Conqueror in Popayán and a Secondary Conqueror in Ecuador

²³The Archaeological Atlas is the main source from which [Mayshar, Moav and Pascali \(2020\)](#) collected this information. The Online Appendix provides details on the definition and source of the data. We are grateful to Luigi Pascali for sharing this data with us.

²⁴See case 2 in the Historical Appendix.

(where Pizarro was the Principal Conqueror).²⁵ Not all conquerors who acted as agents will be considered as Secondary Conquerors. To classify them as such requires a certain degree of autonomy over a complete region, whereas some agents occasionally founded a city or led a small incursion following the orders of a conqueror. But they did not found many other cities or rule over the same area with a certain degree of autonomy during a prolonged period.²⁶

Although it is interesting to consider Secondary Conquerors, this turns out not be useful since there is a an almost perfect match between Secondary and Primary Conquerors who are highly educated.²⁷ This implies that the results which use Secondary Conquerors are essentially identical to those where we look at the education of the Principal Conquerors.

4.6 A Larger Sphere of Influence

The analysis so far takes quite a conservative stance in defining a conqueror's sphere of influence which is defined as areas within 250km of an urban centres founded by a Principal Conqueror. But arguably this could extend further. Of course, there is a trade-off since, as we widen the area, we also have more areas that overlap between adjacent conquerors. Nonetheless, it is still useful to explore whether the results are robust when we expand the domain of each conqueror to 700km. The effect of this can be seen by contrasting the two panels in Figure 1, where the larger territory for each Principal Conqueror is now indicated in panel (a).

We now repeat the core results with these new expanded spheres of influence which more or less covers the entire area of Spanish America. The results are presented in Table 8. It is striking how quantitatively similar they are to the main results. This suggests that the core findings are not too sensitive to how we have coded conqueror spheres of influence.

Table 8 about here

²⁵See cases 3 and 4 in the Historical Appendix.

²⁶See case 4 in the Historical Appendix.

²⁷Appendix Table A.1 shows whether each Principal conqueror also had a Secondary Conqueror. It also gives the the level of education as well as the percentage of the Principal Conqueror's area covered by a Secondary Conqueror.

5 A Spatial Contiguity Design

We now explore a stricter approach to identification by focusing in on conquerors and territories where grid cells are located close to the borders between conquerors with different education levels. This has similarities with a spatial discontinuity approach except for the fact that there is a lack of precision in drawing boundaries around conqueror territories making a sharp discontinuity infeasible. Similar to the approach in [Michalopoulos and Papaioannou \(2013\)](#), we instead construct “thick” boundaries, defined as either a distance of 25km, 50km, or 100km from an adjacent conqueror’s territory. We can then see whether, when the adjacent conquerors have different education levels, there are differences around the boundaries. This does have the virtue that there is still fairly close geographical similarity and we can continue to explore within rather than between country variation as we did in the core results.

Because it requires adjacent conquerors to have different levels of education, we can only apply this to three countries: Mexico, Honduras, and Nicaragua. In Mexico, we have the border between Guzmán (highly educated) and Ibarra (poorly educated); in Honduras and Nicaragua, we have the border between Hernán Cortés (highly educated) and Pedrarias Dávila (poorly educated). [Figure 2](#) shows these areas. Given that it is the largest case, we will also look at this only using data from Mexico. As a backdrop, recall that we have already shown that the main results hold in these three countries, as per Columns (6) and (7) of [Table 6](#).

[Figure 2](#) about here

For this strategy to be credible as a way of getting at conqueror education differences, we need to be sure that the areas around the borders are otherwise similar. We explore this in [Table 9](#). Panel A refers to Mexico, Honduras, and Nicaragua while Panel B shows the results with Mexico only. There is “balance” when it comes to geography and climate. However, ruggedness does appear in some specifications with a negative and significant coefficient, as does soil fertility. The coefficient on Malaria proneness also appears to be positive and significant. In other words, areas adjacent to those with highly educated conquerors appear to have less ruggedness, less fertile soil, and more malaria. Although the areas are not totally balanced, we do not think that this is a concern and we can also control directly for these observable differences.

Table 9 about here

Table 10 presents the findings. The Table has three panels. In panel A, we show the results for the borders in Mexico, Honduras, and Nicaragua. Here, we continue to include country fixed effects to control for post-colonial state differences. In Columns (1) to (4), we report results using cells where Ibarra, de Guzmán, Cortés, and Pedrarias were the conquerors at different distances from the border. In Column (1), we use all the adjacent cells, while in Column (2), we restrict the sample to cells where the distance to the frontier of the cells is less than 25km, looking for a discontinuity as the threshold between conquerors is crossed. Column (3) restricts the sample to cells less than 75km from the border between conqueror territories and Column (4) restricts the sample to a 100km distance. By narrowing the distance, we limit the potential for omitted variable bias to contaminate the identification of conqueror’s education. In Columns (1), (3), and (4) of Table 10, we find that the cells with a highly educated conqueror (de Guzmán, Cortés) have higher levels of contemporary development as captured by the luminosity measure. On average, regions whose first conqueror was highly educated have a (log of) luminosity per capita that is 0.2 standard deviations higher than those without a highly educated principal conqueror. In Column (5), we use an alternative definition of high education which parallels Column (5) of Table 6, i.e. whether a conqueror has a mid level or high level of education. This allows us to include a wider set of contiguous regions and hence we have a larger sample size. Although positive, the coefficient is insignificant underlining our earlier finding that the real signal seems to be having a highly educated conqueror. This finding is in line with the final column of Table 6.

These results support our earlier findings. However, it is interesting to explore whether the effect of who conquered a territory is driven solely by educational differences. To address this, in Panel B reports results from a similar approach using social status rather than education. Among the conquerors that we have in this spatial contiguity design, not all highly educated conquerors also have high social status. We focus on the same core as above sample (Mexico, Honduras, Nicaragua). In Mexico, de Guzmán (high education) has social status 2, and Ibarra (low education) has social status 1. In contrast, in Honduras and Nicaragua, Pedrarias Dávila (low education) has social status 2, and Cortés (high education) has social status 1. Thus, we define the dummy “high social status” which takes value 1 if social status is equal to 2, and we do the regression of the adjacency exercise, just as we do for education. The results in panel

B indicate that the coefficient on “high social status” is positive but not significant. This result seems to suggest that it is education rather than the social status of the conqueror’s family that is driving the results.

Table 10

Many of the grids considered in this exercise are in Mexico and so it makes sense to repeat the analysis using only grid cells in Mexico. We now exploit the observation that the area conquered by de Ibarra (who had the lowest education level) is adjacent to the area of de Guzmán (who had the highest education level). The highly educated Cortés also conquered in Mexico, but the territory that he conquered is *not* adjacent to Ibarra’s area (see Figure 3).

Figure 3 about here

As before, we explore spatial contiguity using different distances to capture “thick” borders between the conquerors’ territories: less than 25km, 50km, and 100km. We will look at whether the areas at the border only are influenced by conqueror’s education.

Panel C presents the results. In Columns (1) to (4), we report results using cells where Ibarra and de Guzmán were the conquerors at different distances from the border. In Column (1), we use all the adjacent cells, while in Column (2) we restrict the sample to cells where the distance to the frontier of the cells is less than 25km looking for a discontinuity at the threshold between Principal Conquerors. Column (3) restricts the sample to cells less than 75km from the border between conqueror territories and Column (4) restricts the sample to a 100km distance.

In all of Columns (2), (3), and (4) we find that the cells with a highly educated conqueror (de Guzmán) have higher levels of contemporary luminosity at night. Finally, in Column (5), we also include cells in the area conquered by Cortés. These cells are not necessarily adjacent to each other and we now find that the areas with the highly educated conquerors (de Guzmán and Cortés) are more developed today.

Taken together these results based on looking at contiguous conqueror territories with heterogeneous education levels reinforce the core findings of the paper, linking education and subsequent development.

6 Sources of Persistence

The results so far provide suggestive evidence of persistence that we have attributed to educational differences between conquerors. But more interesting is to understand *why* this might be the case. A considerable time has passed since the first conquerors came and it is useful to see if there is evidence of any specific persistence channel. It is reasonable to conjecture that conquerors had considerable discretion in the structures that they put in place to govern their territories. Thus, although the official laws were from Spain, they needed to be adapted to context in what is commonly referred to as *leyes indianas*. This discretionary process could have put them on different dynamic paths that have persisted to the present.

In that context, we explore three possible sources of persistence: state capacity, education, and culture (as manifested in attitudes around trust). The first of these is the most promising thing to study as we have some measures both during colonial times, at an intermediate point and in the present. This allows to uncover highly suggestive evidence that state capacity is a source of persistence, with structures that were set up to raise tax revenues and enforce creating persistent changes in the economic fortunes of different territories. Moreover, these echoes of the past seem to survive the partition of territories into modern day countries. We find little compelling evidence that education or trust attitudes are sources of persistence. However, the latter can only be measured in contemporary data whereas state capacity can be measured at three points in time. So the evidence on education and trust is somewhat less compelling.

6.1 State Capacity

State capacity is the most promising avenue for exploring persistence. From a theoretical point of view, the investment base approach of [Besley and Persson \(2009\)](#) stresses irreversible investments that enhance the scope and quality of policy-making. And this can have a persistent effect on subsequent patterns of development, with intertemporal complementarities in returns to investment plausible, especially as the economy develops and education levels grow. Initial state capacity levels in colonial times are likely to be a reflection of the incentives to invest. And more educated rulers could have greater know-how as well as a more enlightened long-run view of their colonial responsibilities beyond pure extraction. Educated leaders may

also have been better at marshalling the kind of cohesive support needed for state capacity investments.

To explore whether such ideas are at work in the period that we are studying, we will look at measures of state capacity at three points in time. First, we see whether contemporary measures of state capacity correlate with conquerors' education levels. We then look at an intermediate point in time, examining state revenues during colonial times, but well after the first conquests. Finally, we look at evidence based on the initial civic infrastructure for the initial period 1573-1620, immediately following the arrival of the first conquerors.

Contemporary Outcomes For present-day outcomes, we use data on the location of civic infrastructure such as government offices which we have extracted from Google Maps. For this purpose, government offices are defined as the offices “of a (supra)national, regional or local government agency or department”. We also identify police offices defined as stations “where police officers patrol from and that is a first point of contact for civilians”. After we have geo-located them, we can assess whether their presence in a location is correlated with the education level of the Principal Conqueror. We look at this first for all countries. We then focus on Mexico where we can also look at measures of municipal revenue raising as a more standard measure of state capacity.

The findings are in Table 11 where the dependent variable in Columns (1) through (4) is a dummy for whether there is a government office or police office located within the 20km × 20km cell. The results indicate that areas that had an educated conqueror have more state capacity measured this way both in the larger sample of grid cells (Columns 1 and 2) and those located in Mexico (Columns 3 and 4).

In Column (5), we examine whether contemporary municipal revenues for Mexico are higher where there was an educated conqueror. We focus here on the sample of municipalities with adjacent conquerors (de Guzmán and de Ibarra). The dependent variable is the (log of) average municipal revenues (2000-2009) per square kilometer. The results are suggestive that revenues are higher today in areas where de Guzmán was the Principal Conqueror. This is supportive of the idea that modern day persistence could be linked to state capacity investment.

Table 11 about here

Evidence from the Colonial Period We now look instead at outcomes closer to the period of conquest using colonial period data from Klein and Tepaske (1982) who provide yearly data on the royal treasuries of the colonies for 1576-1800.²⁸ Specifically, the data contains the revenues and expenditures of 71 *cajas reales* in the Viceroyalty of New Spain, Peru (including Ecuador and Bolivia), Río de la Plata, and Chile; see Figure 4.²⁹ Some *cajas* have information for the 14th Century, but for most of them the information starts in the 18th Century. All revenues are expressed in colonial Spanish pesos.

We assign to each *caja real* the coordinates of the city in which the *caja* was located. Hence, using the map of conqueror regions, we know the conqueror that influenced the area in which the *caja* was located. Note that 11 *cajas* are located outside the 250km conqueror region. We assign to these *cajas* the closest conqueror. We implement the analysis at the *caja* level, assigning to each *caja* the geographical control variables of the corresponding observation (grid cell of 20km×20km). The dependent variable is the log of the average revenues in a particular decade. The results are in Columns (1)-(3) of Table 12. These indicate that the *cajas* in which the first conqueror was highly educated had greater royal revenues during the 18th century. To get a feel for the magnitude, note that the coefficient in Column (1) of Table 12 implies that, all else constant, you have to be around 2000 km closer to the coast to have an equivalent increase in log revenues between 1700 and 1800 as having an educated Principal Conqueror.

We also collected information on civic infrastructure for the period 1573-1620. Specifically, from Lopez de Velasco (1573) and Vazquez de Espinosa (1620), we put together information on the location of hospitals and (religious) colleges in 1573 and 1620. Columns (4) and (5) in Table 12 provide the numbers of hospitals in 1573 and 1620 respectively, while Column (6) has the maximum numbers from the previous two columns. Relative to a mean of 0.005 hospitals, the coefficient 0.006 in Column (6) implies that, on average, regions whose first conqueror was highly educated have 1.2 hospitals more than those without a highly educated conqueror. Columns (7) to (9) show the results from a parallel exercise with colleges. Relative to a mean of 0.03 colleges, the coefficient in Column (9) suggests that, on average, regions whose first conqueror was highly educated have 1.6 colleges more than regions without a

²⁸More information on the project by Klein and Tepaske can be found here: <https://realhacienda.colmex.mx/>

²⁹We do not have data for all *cajas* for all years. Also, the data do not include islands (Cuba, Dominican Republic, Puerto Rico, Jamaica) and New Granada (Colombia, Venezuela, Central America).

highly educated conqueror.

Taken together, the results in Table 12 also suggest that some elements of state capacity building in the form of hospitals and colleges during colonial times were indeed higher in areas with an educated Principal Conqueror.

Table 12 and Figure 4 about here

6.2 Education

We now look at whether education is an additional source of persistence, whether those territories with more educated conquerors have more education today. Here, we can only look at contemporary outcomes and, for this exercise, we use information from the Latino Barometer with each observation (20km×20km grid cell) being assigned to the closest Latino Barometer city. For our education measure, we use the average of the observations in a grid cell.

The results are in Table 13 where the dependent variables are the share of respondents who report their highest level of educational attainment as secondary education and the average years of schooling of respondents in a grid cell. Columns (1) and (2) show that there is no correlation between having an educated conqueror and either having more secondary education or higher average years of schooling. This is also found when we restrict the sample to observations within a 100km radius of a Latino Barometer city. Of course, the data is quite limited. But this does not support the idea that persistence is due to greater educational attainment. In Column (5) we use the data of [Gennaioli et al. \(2013\)](#), and we find a similar result.³⁰

Table 13 about here

6.3 Trust

Another possible source of persistence is through the kind of culture established by the Principal Conquerors which could have a lasting effect on the places that they conquered.

³⁰Here we assign a “NUTS1” region to each 20x20km grid cell. When the grid cell is intersected by more than one “NUTS1” region, it is assigned the “NUTS1” region that occupies the largest area.

We also explore this using the Latino Barometer by looking at a range of trust questions, specifically trust expressed by individuals in government, the police, and in newspapers. As with education, each 20km×20km grid cell is assigned to the closest Latino Barometer city.

The results are in Table 14. The first three columns include all observations (i.e., any distance to a Latino Barometer city), while Columns (4) through (6) include only observations where the closest Latino Barometer city is less than 100km away. For trust in government and in newspapers, there is no correlation at all with the conqueror’s education level. However, for trust in the police, there does appear to be a positive correlation. This could be consistent with some persistence operating through legal capacity but one should not read too much into a single finding like this.

Table 14 about here

7 Concluding Comments

This paper contributes to debates about how colonialism has had a long-run effect on development. We have focused on Latin America and explored differences due to whether the Principal Conqueror of a territory was highly educated or not. This has been made possible by assembling a new data set which matches conquerors to their territories in the first wave of colonization along with collecting data on their education levels. There is substantial within-country variation in who conquered which areas and we find robust evidence of a link between the Principal Conqueror’s education and the level of subsequent development.

When exploring possible mechanisms, we find the strongest evidence that it is persistent state capacity that could be the explanation for this. This makes a lot of sense for Latin America since it has had a huge amount of churn in its political institutions over the period since colonization, whereas investments in state structures have been more persistent. This focus on state capacity building also makes sense given that the blueprints for organization of the state become part of the durable fabric of the state and can reflect important individual initiatives.

Many important leaders through history are known for the irreversible changes that they made in building state capacity and institutions. And it is striking how many public buildings and the sinews of the state that they have created have a long-history. And in some

cases their founders are still celebrated. A case in point, is Alexander Hamilton who is still remembered for his foundational work in creating the US Treasury.

The findings in this paper are also consistent with the idea that enlightened leadership matters, especially when there is substantial discretion in the way that it is exercised. Educated leaders can exploit their knowledge acquired through education to good effect. That does not necessarily mean that they are infinitely wise in their own right, but they may have realized the importance of distilling known lessons from elsewhere and corralling others to use good practice. However, the exact way in which leaders' education matters remains an important topic for further research.

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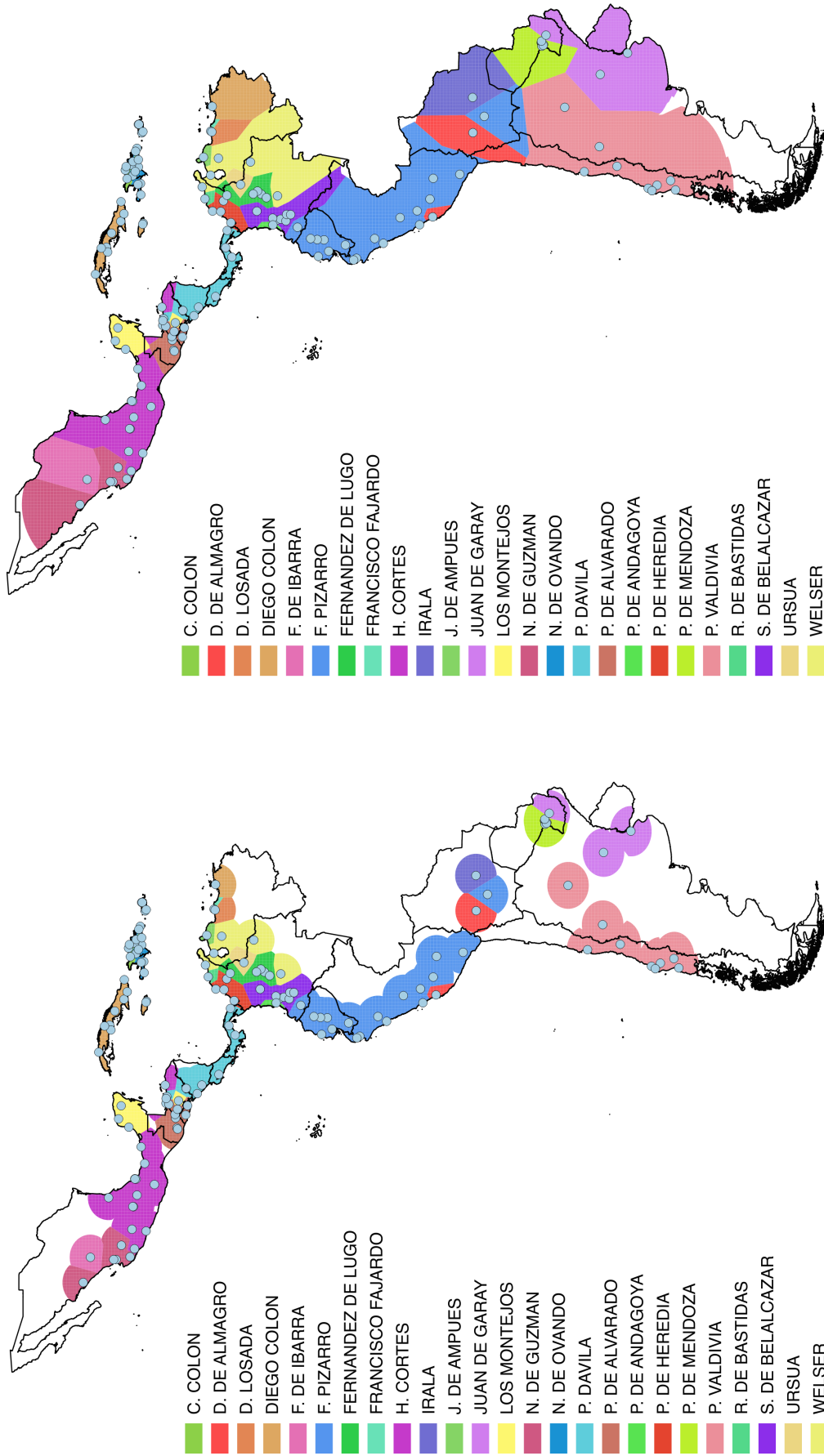
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FIGURE 1: Conqueror Areas with Cities



(a) Principal Conquerors (250 km)

(b) Principal Conquerors (700 km)

FIGURE 2: Adjacent Conquerors in Mexico, Honduras, and Nicaragua

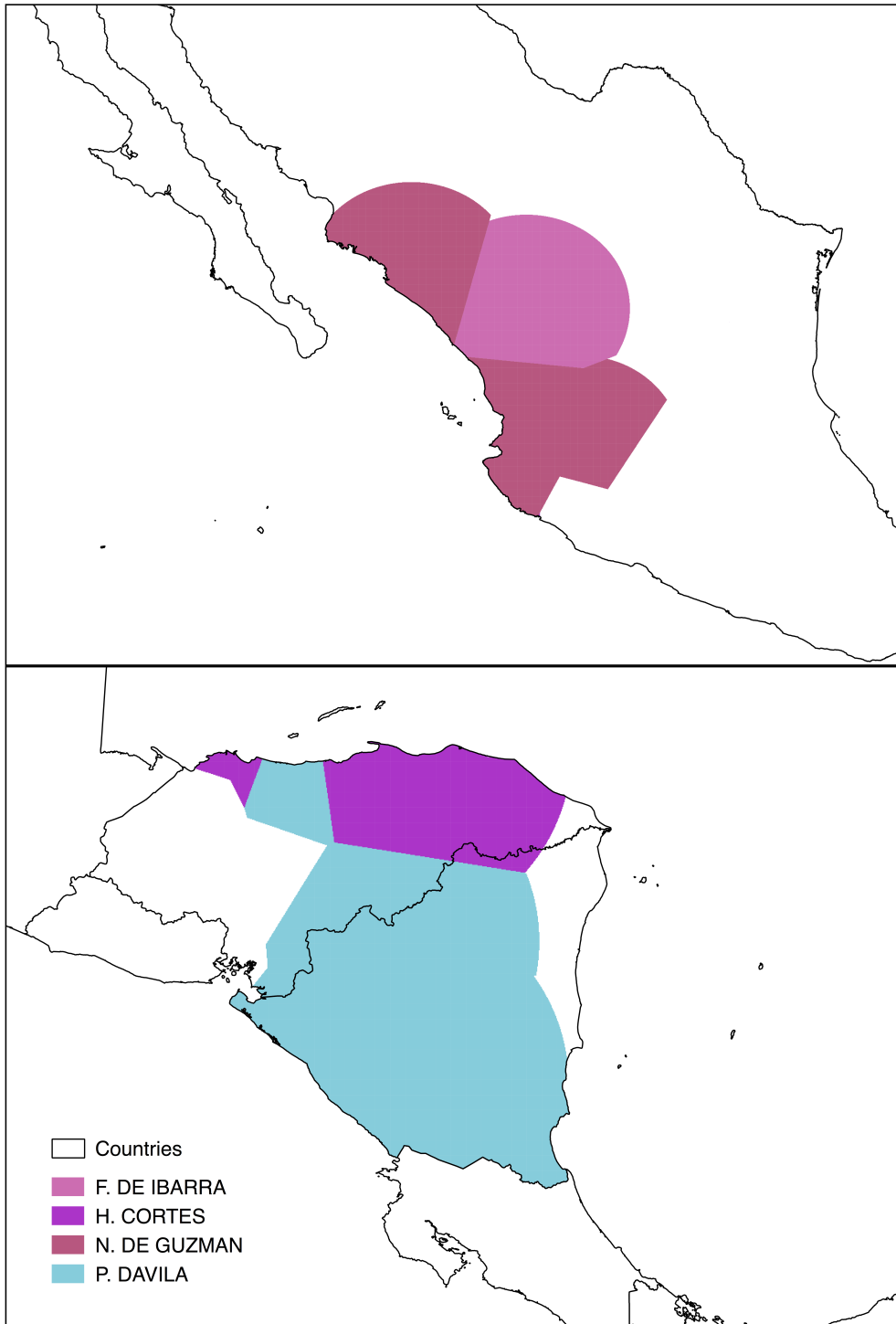


FIGURE 3: Adjacent Conquerors in Mexico



FIGURE 4: Cajas Reales and Conqueror Areas

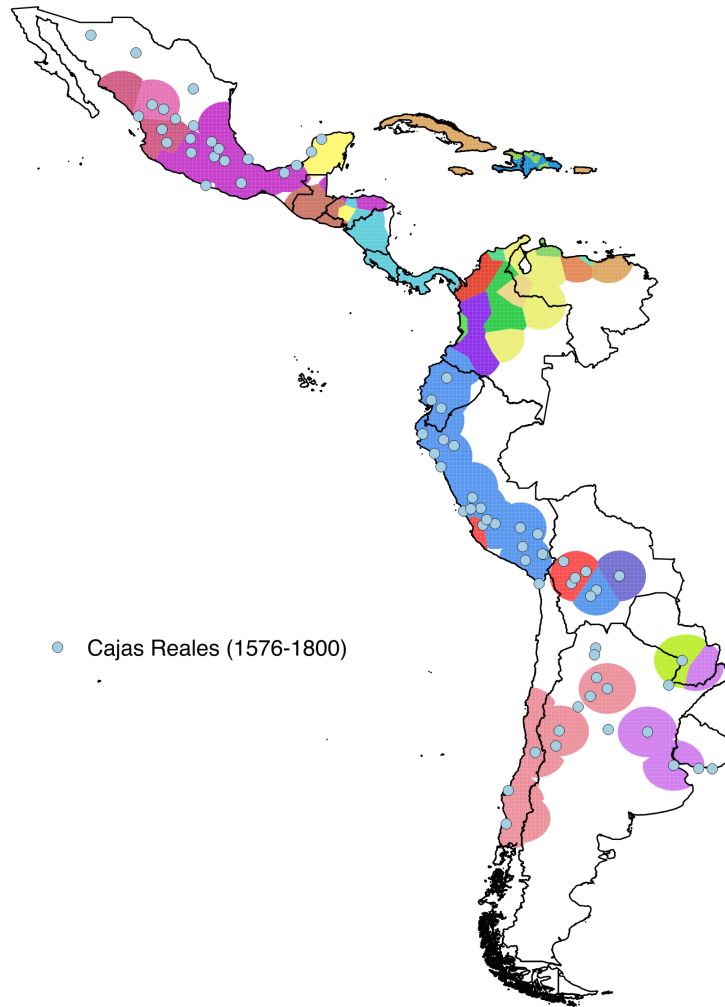


TABLE 1: List of Principal Conquerors and their Characteristics

Conqueror	% of Territory	Year of First Foundation	Education	Age	Tenure	Social Status	Place of Origin
CRISTOBAL COLON	0.375	1492	2	41	8	1	Italia
DIEGO COLON	3.488	1508	1	26	16	2	Portugal
DIEGO DE ALMAGRO	3.111	1535	1	55	3	0	Castilla-La Nueva
DIEGO DE LOSADA	0.979	1567	.	56	0	1	Leon
DOMINGO MARTINEZ DE IRALA	2.686	1561	2	55	0	1	Vascongadas
FERNANDEZ DE LUGO	2.411	1536	.	61	0	1	Andalucia
FRANCISCO DE IBARRA	2.465	1563	1	24	12	1	Vascongadas
FRANCISCO FAJARDO	0.105	1555	.	25	5	1	Venezuela
FRANCISCO PIZARRO	18.367	1529	1	51	12	0	Extremadura
HERNAN CORTES	10.729	1519	3	34	7	1	Extremadura
JUAN DE AMPUES	0.402	1527	2	77	2	.	Aragon
JUAN DE GARAY	9.410	1570	1	42	13	1	Vascongadas
FRANCISCO DE MONTEJO (HIJO)	2.559	1540	.	32	10	1	Andalucia
NICOLAS DE OVANDO	0.894	1502	2	51	7	2	Extremadura
NUÑO DE GUZMAN	3.982	1529	3	39	7	2	Castilla-La Nueva
PASCUAL DE ANDAGOYA	0.267	1540	1	42	1	1	Vascongadas
PEDRARIAS DAVILA	4.151	1514	1	74	17	2	Castilla-La Vieja
PEDRO DE ALVARADO	2.530	1524	.	.	17	1	Extremadura
PEDRO DE HEREDIA	1.550	1533	.	33	22	1	Castilla-La Nueva
PEDRO DE MENDOZA	2.932	1537	1	38	0	2	Andalucia
PEDRO DE URSUA	1.034	1549	1	23	2	1	Navarra
PEDRO DE VALDIVIA	16.172	1541	1	41	12	1	Extremadura
RODRIGO DE BASTIDAS	0.254	1525	.	52	2	.	Andalucia
SEBASTIAN DE BELALCAZAR	3.052	1531	1	41	19	0	Andalucia
BARTOLOME WELSER	6.094	1530	2	46	16	2	Alemania
% of Territory with Information	100	89.612	97.470	100	99.344	100	

TABLE 2: Summary Statistics for Conqueror Characteristics

	N	mean	sd	min	max
Year of First Foundation	18	1532	20.766	1492	1570
Year of Capitulation	14	1528	21.548	1492	1569
Education	18	1.500	0.707	1	3
Age	18	44.444	14.734	23	77
Tenure	18	8.556	6.299	0	19
Social Status	17	1.176	0.728	0	2

Notes - The unit of observation is the conqueror. Summary statistics for conquerors with information on education.

TABLE 3: Validating Geography

<i>Dependent Variable: High educ</i>	
	(1)
Log Ruggedness	-0.001 [0.001]
Fertile Soil	-0.006 [0.006]
Log Temperature	0.011 [0.011]
Log Precipitation	0.030 [0.019]
Latitude	-0.139 [0.144]
Malaria endemicity	0.018* [0.009]
Average Caloric Suitability	0.031 [0.029]
Log Distance to Coast	-0.039 [0.024]
Log Pre Colonial Pop Density	0.007 [0.018]
Average Pre Colonial Hierarchy	0.047 [0.036]
Observations	13,726
R-squared	0.824

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation is the 20 km × 20 km grid cell. The regression includes country fixed effects. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). All variables except High educ are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 4: Conqueror Fixed Effects I

Dependent Variable: Log. Night-light 2010 per capita

	(1)	(2)	(3)	(4)	(5)
Geographic controls	No	Yes	Yes	Yes	Yes
Climate controls	No	No	Yes	Yes	Yes
Distance to Coast	No	No	No	Yes	Yes
Environmental Controls	No	No	No	No	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	17,859	17,828	17,795	17,795	17,795
R-squared	0.204	0.212	0.242	0.245	0.253
F stat. (conqueror FE)	3793.008	8171.769	2996.440	4984.492	9986.154
p-value (conqueror FE)	0.000	0.000	0.000	0.000	0.000

Notes - The unit of observation is the 20 km \times 20 km grid cell. F statistic for the joint significance of conqueror fixed effects from a regression of Log. Night-light 2010 per capita on conqueror fixed effects with robust standard errors clustered at the conqueror level. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 5: Conqueror Fixed Effects II

Dependent Variable: Conqueror FE

	(1)	(2)	(3)	(4)	(5)
High education	1.033*** [0.270]	1.063*** [0.326]			
Year of first foundation		0.073 [0.243]	-0.034 [0.732]	-0.019 [0.255]	0.129 [0.243]
Age				-0.244 [0.287]	
Social Status = 0					-0.845 [0.579]
Social Status = 1					-0.456 [0.667]
Place of origin	No	No	Yes	No	No
Observations	18	18	18	18	17
R-squared	0.114	0.119	0.541	0.058	0.088

Notes - Robust standard errors in brackets. The unit of observation is the conqueror. The dependent variable is the conqueror FE estimated in Table 1. We weight each observation by the inverse of the standard errors of the dependent variable (estimated in Table 1). High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). The categories of place of origin correspond to the regions listed in Boyd-Bowman (*Indice geobiografico de cuarenta mil pobladores españoles de America en el siglo XVI*) when the conqueror is from Spain. Foreign conquerors are disaggregated by country of origin. There are 9 categories in total: Andalucía, Castilla-La Nueva, Castilla-La Vieja, Extremadura, Navarra, Vascongadas, Alemania, Italia, and Portugal. All variables except High educ, social status, and place of origin fixed effects are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 6: Development and Conqueror's Education

<i>Dependent Variable: Log. Night-light 2010 per capita</i>							
	Full Sample (1)	Without Pizarro (2)	Without Cortes (3)	Full Sample (4)	Full Sample (5)	Mexico, Hon- duras, Nicaragua (6)	Mexico (7)
High educ	0.752*** [0.141] (0.280)	0.909*** [0.255]	0.534*** [0.111]	0.974*** [0.224]		0.270** [0.049]	0.389*** [0.030]
Educ = 2					0.449 [0.362]		
Educ = 3					0.866*** [0.161]		
Age	0.147 [0.128]	-0.046 [0.183]	0.297** [0.102]	0.048 [0.128]	-0.109 [0.284]		
Social Status = 0	0.358*** [0.040]	0.403*** [0.047]	0.428*** [0.096]	0.475*** [0.055]	0.619*** [0.201]		
Social Status = 1	0.285*** [0.044]	-0.238* [0.133]	0.356*** [0.119]	0.264*** [0.054]	0.209** [0.078]		
Tenure				-0.050* [0.027]			
Place of origin	Yes	Yes	Yes	Yes	Yes	No	No
Year of first foundation	Yes	Yes	Yes	Yes	Yes	No	No
Geographic Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Climate Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Environmental Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	No
Observations	15,645	12,392	13,779	15,645	15,645	3359	2767
R-squared	0.254	0.239	0.231	0.254	0.254	0.300	0.079

Notes - Robust standard errors clustered at the conqueror level in brackets. Conley standard errors using a distance cutoff of 1 degree in parenthesis. The unit of observation is the 20 km × 20 km grid cell. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). In Column (5), the category of reference is education equal to one. The categories of place of origin correspond to the regions listed in Boyd-Bowman (*Indice geobiografico de cuarenta mil pobladores españoles de America en el siglo XVI*) when the conqueror is from Spain. Foreign conquerors are disaggregated by country of origin. There are 9 categories in total: Andalusia, Castilla-La Nueva, Castilla-La Vieja, Extremadura, Navarra, Vascongadas, Alemania, Italia, and Portugal. All variables except education, social status, and place of origin fixed effects are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 7: Precolonial Characteristics

Dependent Variable: Log. Night-light 2010 per capita

	(1)	(2)	(3)	(4)	(5)
High education	0.646*** [0.192]	0.752*** [0.138]	0.647*** [0.191]	0.747*** [0.141]	0.641*** [0.192]
Log of precolonial population density	0.090* [0.046]		0.090* [0.049]		0.088* [0.047]
Mean precolonial hierarchy		0.025 [0.031]	-0.002 [0.033]		
Precolonial temples dummy				0.278** [0.117]	0.287* [0.135]
Year of first foundation	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes
Climate controls	Yes	Yes	Yes	Yes	Yes
Environmental controls	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes
Personal Characteristics	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	13,885	15,454	13,726	15,645	13,885
R-squared	0.245	0.254	0.246	0.254	0.246

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation is the 20 km × 20 km grid cell. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. Personal characteristics include conqueror's age, social status, and place of origin. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). All variables except education, social status, place of origin, and temples are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 8: Development and Conqueror Education - A Larger Sphere of Influence (700km)

Dependent Variable: Log. Night-light 2010 per capita

	Full Sample (1)	Without Pizarro (2)	Without Cortes (3)	Full Sample (4)	Full Sample (5)
High educ	0.754*** [0.168] (0.210)	0.624*** [0.146]	0.765*** [0.104]	0.617** [0.291]	
Educ = 2					0.274 [0.327]
Educ = 3					0.904*** [0.116]
Age	0.118* [0.060] (0.093)	0.174** [0.073]	0.144** [0.051]	0.158* [0.086]	-0.079 [0.209]
Social Status = 0	0.442*** [0.026] (0.104)	0.409*** [0.038]	0.539*** [0.110]	0.343*** [0.105]	0.572*** [0.159]
Social Status = 1	0.293*** [0.041] (0.104)	-0.084 [0.092]	0.428** [0.160]	0.297*** [0.039]	0.228*** [0.049]
Tenure				0.034 [0.037]	
Place of origin	Yes	Yes	Yes	Yes	Yes
Year of first foundation	Yes	Yes	Yes	Yes	Yes
Geographic Variables	Yes	Yes	Yes	Yes	Yes
Climate Variables	Yes	Yes	Yes	Yes	Yes
Environmental Variables	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Observations	28,388	23,174	26,110	28,388	28,388
R-squared	0.185	0.173	0.161	0.185	0.185

Notes - Robust standard errors clustered at the conqueror level in brackets. Conley standard errors using a distance cutoff of 1 degree in parenthesis. The unit of observation is the 20 km × 20 km grid cell. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). In Column (5), the category of reference is education equal to one. All variables except education, social status, and place of origin fixed effects are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 9: Characteristics of Contiguous Conquerors' Territories

<i>Dependent Variable: High educ</i>				
	All Dist (1)	Dist<25km (2)	Dist<75km (3)	Dist<100km (4)
Panel A: Mexico, Honduras, and Nicaragua				
Log Ruggedness	-0.022*** [0.001]	0.020 [0.025]	-0.030** [0.008]	-0.022* [0.007]
Fertile Soil	-0.041 [0.023]	-0.031** [0.008]	-0.067*** [0.009]	-0.066** [0.017]
Log Temperature	0.122 [0.107]	0.086 [0.051]	0.119 [0.062]	0.144 [0.063]
Log Precipitation	-0.024 [0.142]	0.080 [0.043]	-0.001 [0.073]	0.002 [0.105]
Latitude	0.380* [0.128]	0.083 [0.280]	0.193 [0.229]	0.248 [0.202]
Average Caloric Suitability	0.275* [0.096]	0.002 [0.026]	0.098 [0.055]	0.136 [0.072]
Log Distance to Coast	-0.077 [0.061]	0.055 [0.032]	-0.087 [0.069]	-0.097 [0.067]
Malaria endemicity - Galor	0.152 [0.076]	-0.071** [0.014]	0.083** [0.021]	0.119*** [0.010]
Observations	1702	237	556	696
R-squared	0.429	0.018	0.104	0.164
Panel B: Mexico				
Log Ruggedness	-0.015 [0.003]	0.057 [0.011]	0.034 [0.024]	0.030 [0.015]
Fertile Soil	-0.044 [0.035]	0.009 [0.007]	-0.047** [0.001]	-0.061** [0.004]
Log Temperature	0.241 [0.136]	0.253 [0.049]	0.348* [0.045]	0.338** [0.007]
Log Precipitation	-0.229 [0.052]	-0.172** [0.006]	-0.311 [0.132]	-0.319 [0.119]
Latitude	-0.048 [0.013]	0.010 [0.009]	-0.008 [0.048]	-0.010 [0.050]
Average Caloric Suitability	0.534** [0.022]	0.218* [0.028]	0.450 [0.128]	0.513 [0.126]
Log Distance to Coast	0.068 [0.027]	0.132 [0.057]	0.122*** [0.000]	0.111* [0.012]
Observations	1110	140	350	448
R-squared	0.581	0.080	0.285	0.366

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation is the 20 km × 20 km grid cell. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). All variables except High educ are standardized as to have mean 0 and standard deviation 1. * Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 10: Results for Contiguous Conquerors with Different Levels of Education

Dependent Variable: Log. Night-light 2010 per capita

Panel A: Different Education in Mexico, Honduras, and Nicaragua					
	All Dist (1)	Dist<25km (2)	Dist<75km (3)	Dist<100km (4)	Dist<100km (5)
High educ	0.237** [0.075]	0.117 [0.060]	0.229** [0.059]	0.236** [0.062]	
High educ (3 or 2)					0.059 [0.103]
Observations	1702	237	556	696	1764
R-squared	0.381	0.292	0.320	0.326	0.217
Country FE	Yes	Yes	Yes	Yes	Yes
Panel B: Different Social Status in Mexico, Honduras, and Nicaragua					
	All Dist (1)	Dist<25km (2)	Dist<75km (3)	Dist<100km (4)	
High social status	0.027 [0.166]	0.110 [0.062]	0.152 [0.111]	0.142 [0.129]	
Observations	1702	237	556	696	
R-squared	0.374	0.291	0.313	0.319	
Country FE	Yes	Yes	Yes	Yes	
Panel C: Different Education in Mexico					
	All Dist (1)	Dist<25km (2)	Dist<75km (3)	Dist<100km (4)	All Dist, with Cortes (5)
High educ	0.310 [0.076]	0.187** [0.013]	0.303** [0.022]	0.320* [0.028]	0.391*** [0.028]
Observations	1110	140	350	448	2767
R-squared	0.199	0.254	0.276	0.221	0.078
Country FE	No	No	No	No	No
Geographic Variables	Yes	Yes	Yes	Yes	Yes
Climate Variables	Yes	Yes	Yes	Yes	Yes
Environmental Variables	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation is the 20 km × 20 km grid cell. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude and caloric suitability. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). High social status is a dummy variable that takes value 1 if social status equals category two, and 0 if social status equals category one. All variables except High educ and High social status are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 11: Civic Infrastructure and Municipal Revenues

	Only Mexico				
	Gov. Office (1)	Police Office (2)	Gov. Office (3)	Police Office (4)	Municipal Revenues (5)
High education	0.185*** [0.056]	0.271*** [0.064]	0.069* [0.017]	0.062* [0.019]	1.490* [0.453]
Year of first foundation	Yes	Yes	No	No	No
Geographic controls	Yes	Yes	Yes	Yes	Yes
Climate Variables	Yes	Yes	Yes	Yes	Yes
Environmental controls	Yes	Yes	Yes	Yes	Yes
Personal Characteristics	Yes	Yes	No	No	No
Distance to Coast	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	No	No	No
Observations	15,685	15,685	2777	2777	2004
R-squared	0.074	0.134	0.020	0.014	0.383

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation in Columns (1)-(4) is the 20 km × 20 km grid cell. In Columns (3) and (4) the sample is restricted to Mexico. In Column (5) the unit of observation is the Mexican municipality. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. Personal characteristics include conqueror's age, social status, and place of origin. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). The dependent variable takes value 1 if there is a government office (Columns (1) and (2)) or a police office (Columns (3) and (4)) within the 20 km × 20 km observation, and 0 otherwise. In Column (5) the dependent variable is log average municipal revenues (2000-2009) per per km^2 .

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 12: Royal Revenues and Civic Infrastructure

	Royal Revenues 1790- 1800 (1)	Royal Revenues 1780- 1790 (2)	Royal Revenues 1770- 1780 (3)	Hospitals Espinosa 1620 (4)	Hospitals Velasco 1573 (5)	Hospitals Max 1573- 1620 (6)	Colegios Espinosa 1620 (7)	Colegios Velasco 1573 (8)	Colegios Max 1573- 1620 (9)
High education	4.200*** [1.163]	3.826** [1.517]	3.748** [1.283]	0.005* [0.002]	0.005* [0.003]	0.006** [0.002]	0.040** [0.016]	0.038*** [0.011]	0.050** [0.018]
Year of first foundation	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Climate controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Environmental controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	58	60	56	15,685	15,685	15,685	15,685	15,685	15,685
R-squared	0.786	0.735	0.743	0.003	0.006	0.004	0.003	0.004	0.003

Notes - The unit of observation is the *Caja Real* in Columns (1)-(3) and the 20 km × 20 km grid cell in Columns (4)-(9). Robust standard errors clustered at the conqueror level in brackets. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. Personal characteristics include conqueror's age, social status, and place of origin. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). The dependent variable is log average revenues by decade in Columns (1)-(3), the number of hospitals reported in Lopez de Velasco (1573), Vazquez de Espinosa (1620), or the maximum of these two sources in Columns (4)-(6), and the number of education centers (Colegios and ecclesiastical institutions) reported in Lopez de Velasco (1573), Vazquez de Espinosa (1620), or the maximum of these two sources in Columns (7)-(9). All variables except number of hospitals, number of education centers, High educ, social status, and place of origin fixed effects are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 13: Educational Persistence

	Latinobarometer				Gennaioli et al. (2013)
	Secondary Educ (1)	Av Years Schooling (2)	Secondary Educ (3)	Av Years Schooling (4)	Av Years Schooling (5)
High educ	0.174 [0.401]	-0.210 [0.280]	0.369 [0.358]	-0.262 [0.303]	-0.152 [0.221]
Individual controls	Yes	Yes	Yes	Yes	No
Year of first foundation	Yes	Yes	Yes	Yes	Yes
Geographic Variables	Yes	Yes	Yes	Yes	Yes
Climate Variables	Yes	Yes	Yes	Yes	Yes
Environmental Variables	Yes	Yes	Yes	Yes	Yes
Personal Characteristics	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Observations	15,685	15,685	9479	9479	14,279
R-squared	0.532	0.649	0.550	0.643	0.698

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation is the 20 km × 20 km grid cell. In Columns (1)-(4), the data is provided from the Latinobarometer. In Columns (3)-(4), the sample is restricted to observations with distance to the closest Latinobarometer city < 100 km. The dependent variables are the share of respondents for which secondary education is the highest level of education achieved (Columns (1) and (3)) and average years of schooling (Columns (2) and (4)). In Column (5), the dependent variable is average years of education from Gennaioli et al. (2013). The authors provide data on education for first-level administrative units. We assign the corresponding administrative unit to each grid cell. The results are unchanged when clustering standard errors at the administrative unit level. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. Personal characteristics include conqueror's age, social status, and place of origin. The vector of individual controls includes respondent characteristics: average age, proportion of females, and proportion of individuals by social class (upper class and middle class). High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). All variables except High educ, social status, and place of origin fixed effects are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE 14: Trust

Dependent Variable: Share of respondents who trust

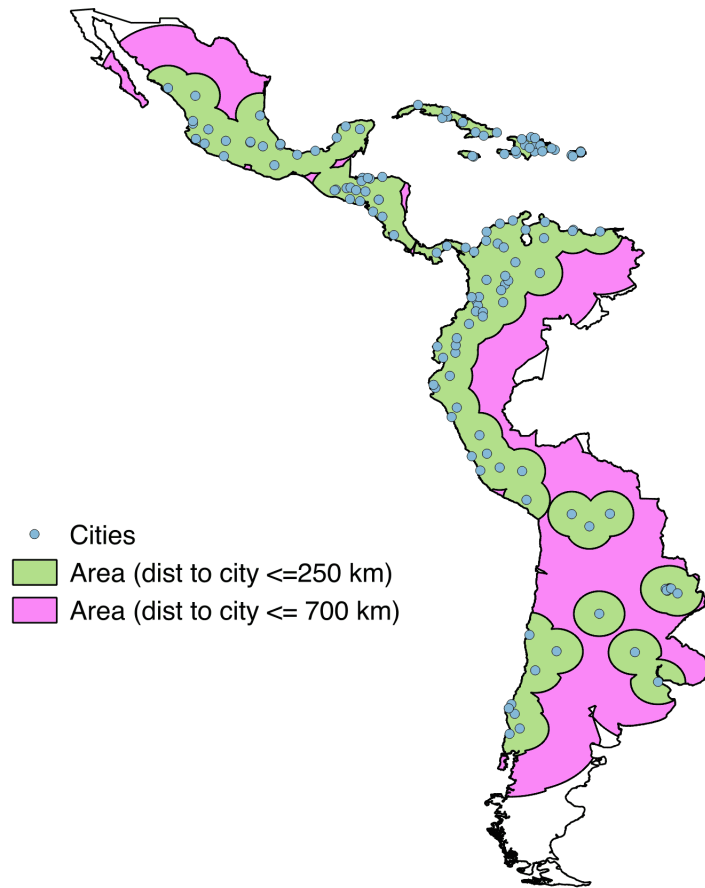
	Government (1)	Police (2)	Newspapers (3)	Government (4)	Police (5)	Newspapers (6)
High education	0.442 [0.664]	0.970*** [0.279]	-0.242 [0.615]	0.398 [0.645]	0.845*** [0.229]	-0.218 [0.701]
Individual controls	Yes	Yes	Yes	Yes	Yes	Yes
Year of first foundation	Yes	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes	Yes
Climate controls	Yes	Yes	Yes	Yes	Yes	Yes
Environmental controls	Yes	Yes	Yes	Yes	Yes	Yes
Personal Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,685	15,685	15,685	9479	9479	9479
R-squared	0.304	0.384	0.303	0.304	0.393	0.245

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation is the 20 km × 20 km grid cell. In Columns (4)-(7), the sample is restricted to observations with distance to the closest Latino Barometer city < 100km. The dependent variable is the share of respondents who trust the government, the police, or newspapers (from the Latino Barometer). Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. Personal characteristics include conqueror's age, social status, and place of origin. The vector of individual controls includes respondent characteristics: average age, proportion of females, and proportion of individuals by social class (upper class and middle class). High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). All variables except High educ, social status, and place of origin fixed effects are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

A Appendix Figures

FIGURE 5: Conqueror Areas 750km vs 250km



B Appendix Tables

TABLE A.1: Secondary Conquerors

Region	Level 1	Educ Level 1	Level 2	Educ Level 2	Per of territory
LA ESPAÑOLA	C. COLON	2	C. COLON	2	1
CASTILLA DEL ORO	P. DAVILA	1	P. DAVILA	1	0.104
CASTILLA DEL ORO	P. DAVILA	1	G. DE ESPINOSA	2	0.231
CASTILLA DEL ORO	P. DAVILA	1	F. HERNANDEZ DE CORDOBA	?	0.664
CHILE	P. VALDIVIA	1	P. VALDIVIA	1	0.814
CHILE	P. VALDIVIA	1	F. VILLAGRAN	?	0.186
COLOMBIA	FERNANDEZ DE LUGO	?	J. DE QUESADA	3	1
COLOMBIA	P. DE ANDAGOYA	1	P. DE ANDAGOYA	1	1
COLOMBIA	P. DE HEREDIA	?	P. DE HEREDIA	?	1
COLOMBIA	R. DE BASTIDAS	?	R. DE BASTIDAS	?	1
COLOMBIA	S. DE BELALCAZAR	1	S. DE BELALCAZAR	1	1
COLOMBIA	URSUA	1	URSUA	1	1
COLOMBIA	WELSER	2	FEDERMANN	2	1
CUBA	DIEGO COLON	1	D. VELAZQUEZ	1	1
GUATEMALA	P. DE ALVARADO	?	P. DE ALVARADO	?	1
HONDURAS	H. CORTES	3	C. DE OLID	?	0.703
HONDURAS	H. CORTES	3	H. CORTES	3	0.297
HONDURAS	LOS MONTEJOS	?	LOS MONTEJOS	?	1
HONDURAS	P. DAVILA	1	GIL GONZALEZ DAVILA	2	1
JAMAICA	DIEGO COLON	1	ESQUIVEL	?	1
LA ESPAÑOLA	N. DE OVANDO	2	N. DE OVANDO	2	1
MEXICO	F. DE IBARRA	1	F. DE IBARRA	1	1
MEXICO	H. CORTES	3	H. CORTES	3	1
MEXICO	LOS MONTEJOS	?	LOS MONTEJOS	?	1
MEXICO	N. DE GUZMAN	3	N. DE GUZMAN	3	1
PERU	D. DE ALMAGRO	1	D. DE ALMAGRO	1	1
PERU	F. PIZARRO	1	F. PIZARRO	1	0.679
PERU	F. PIZARRO	1	S. DE BELALCAZAR	1	0.186
PERU	F. PIZARRO	1	D. DE ALMAGRO	1	0.053
PERU	F. PIZARRO	1	G. PIZARRO	1	0.082
PUERTO RICO	DIEGO COLON	1	PONCE DE LEON	1	1
RÍO DE LA PLATA	IRALA	2	IRALA	2	1
RÍO DE LA PLATA	JUAN DE GARAY	1	JUAN DE GARAY	1	1
RÍO DE LA PLATA	P. DE MENDOZA	1	AYOLAS	?	0.448
RÍO DE LA PLATA	P. DE MENDOZA	1	IRALA	2	0.552
VENEZUELA	D. LOSADA	?	D. LOSADA	?	1
VENEZUELA	DIEGO COLON	1	DIEGO COLON	1	1
VENEZUELA	FRANCISCO FAJARDO	?	FRANCISCO FAJARDO	?	1
VENEZUELA	J. DE AMPUES	2	J. DE AMPUES	2	1
VENEZUELA	WELSER	2	ALFINGER	2	0.396
VENEZUELA	WELSER	2	WELSER	2	0.604

TABLE A.2: Development and Conqueror Education (aggregated place of origin)

Dependent Variable: Log. Night-light 2010 per capita

	Full Sample (1)	Without Pizarro (2)	Without Cortes (3)	Full Sample (4)	Full Sample (5)
High educ	1.049*** [0.200]	1.174*** [0.183]	0.874*** [0.090]	1.370*** [0.164]	
Educ = 2					0.868*** [0.239]
Educ = 3					1.040*** [0.090]
Age	-0.173* [0.088]	-0.315*** [0.073]	-0.193*** [0.062]	-0.220*** [0.040]	-0.420*** [0.080]
Social Status = 0	0.270*** [0.083]	0.369*** [0.062]	0.014 [0.154]	0.561*** [0.065]	0.842*** [0.139]
Social Status = 1	0.208*** [0.038]	-0.366*** [0.083]	-0.070 [0.136]	0.202*** [0.053]	0.121** [0.046]
Tenure				-0.105*** [0.019]	
Place of origin	Yes	Yes	Yes	Yes	Yes
Year of first foundation	Yes	Yes	Yes	Yes	Yes
Geographic Variables	Yes	Yes	Yes	Yes	Yes
Climate Variables	Yes	Yes	Yes	Yes	Yes
Environmental Variables	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Observations	15,645	12,392	13,779	15,645	15,645
R-squared	0.253	0.238	0.230	0.253	0.254

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation is the 20 km × 20 km grid cell. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). In Column (5), the category of reference is education equal to one. Place of origin includes 8 categories: Andalusia, Castilla y Leon, Castilla-La Mancha, Extremadura, North Spain, Alemania, Italia, and Portugal. All variables except education, social status, and place of origin fixed effects are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE A.3: Table 11 Controlling for Precolonial Characteristics

	Gov. Office (1)	Police Office (2)	Gov. Office (3)	Police Office (4)	Municipal Revenues (5)
High educ	0.145** [0.055]	0.176** [0.077]	0.056** [0.012]	0.048** [0.007]	1.145** [0.204]
Year of first foundation	Yes	Yes	No	No	No
Geographic Variables	Yes	Yes	Yes	Yes	Yes
Climate Variables	Yes	Yes	Yes	Yes	Yes
Environmental Variables	Yes	Yes	Yes	Yes	Yes
Personal Characteristics	Yes	Yes	No	No	No
Distance to Coast	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	No	No	No
Precolonial Characteristics	Yes	Yes	Yes	Yes	Yes
Observations	13,742	13,742	2692	2692	2000
R-squared	0.069	0.148	0.037	0.033	0.429

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation in Columns (1)-(4) is the 20 km × 20 km grid cell. In Columns (3) and (4) the sample is restricted to Mexico. In Column (5) the unit of observation is the Mexican municipality. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. Personal characteristics include conqueror's age, social status, and place of origin. Precolonial characteristics include pre-colonial population density and mean pre-colonial hierarchy. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). The dependent variable takes value 1 if there is a government office (Columns (1) and (3)) or a police office (Columns (2) and (4)) within the 20 km × 20 km observation, and 0 otherwise. In Column (5) the dependent variable is log average municipal revenues (2000-2009) per km^2 .

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE A.4: Table 12 Controlling for Precolonial Characteristics

	Royal Revenues 1790- 1800 (1)	Royal Revenues 1780- 1790 (2)	Royal Revenues 1770- 1780 (3)	Hospitals Espinosa (4)	Hospitals Velasco (5)	Hospitals Maxi- mum (6)	Colegios Espinosa (7)	Colegios Velasco (8)	Colegios Maxi- mum (9)
High educ	5.960** [1.796]	5.058*** [1.195]	1.258 [1.205]	0.011*** [0.004]	0.004 [0.003]	0.012*** [0.004]	0.057* [0.028]	0.022** [0.010]	0.066* [0.031]
Year of first foundation	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Climate Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Environmental Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Precolonial Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	56	58	54	13,742	13,742	13,742	13,742	13,742	13,742
R-squared	0.798	0.749	0.771	0.003	0.002	0.003	0.004	0.004	0.004

Notes - The unit of observation is the *Caja Real* in Columns (1)-(3) and the 20 km × 20 km grid cell in Columns (4)-(9). Robust standard errors clustered at the conqueror level in brackets. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. Personal characteristics include conqueror's age, social status, and place of origin. Precolonial characteristics include population density and mean hierarchy. High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). The dependent variable is log average revenues by decade in Columns (1)-(3), the number of hospitals reported in [Lopez de Velasco \(1573\)](#), [Vazquez de Espinosa \(1620\)](#), or the maximum of these two sources in Columns (4)-(6), and the number of education centers (Colegios and ecclesiastical institutions) reported in [Lopez de Velasco \(1573\)](#), [Vazquez de Espinosa \(1620\)](#), or the maximum of these two sources in Columns (7)-(9). All variables except number of hospitals, number of education centers, High education, social status, and place of origin fixed effects are standardized as to have mean zero and unit standard deviation.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE A.5: Table 13 Controlling for Precolonial Characteristics

	Latinobarometer				Gennaioli et al. (2013)
	Secondary Educ (1)	Av Years Schooling (2)	Secondary Educ (3)	Av Years Schooling (4)	Av Years Schooling (5)
High educ	0.732*	0.260	0.884**	0.137	-0.059
	[0.362]	[0.340]	[0.357]	[0.383]	[0.254]
Individual controls	Yes	Yes	Yes	Yes	No
Year of first foundation	Yes	Yes	Yes	Yes	Yes
Geographic Variables	Yes	Yes	Yes	Yes	Yes
Climate Variables	Yes	Yes	Yes	Yes	Yes
Environmental Variables	Yes	Yes	Yes	Yes	Yes
Personal Characteristics	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Precolonial Characteristics	Yes	Yes	Yes	Yes	Yes
Observations	13,742	13,742	8704	8704	13,316
R-squared	0.546	0.651	0.556	0.645	0.749

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation is the 20 km × 20 km grid cell. In Columns (1)-(4), the data provide from the Latinobarometer. In Columns (3)-(4), the sample is restricted to observations with distance to the closest Latinobarometer city < 100km. The dependent variables are the share of respondents for which secondary education is the highest level of education achieved (Columns (1) and (3)) and average years of schooling (Columns (2) and (4)). In Column (5), the dependent variable is average years of education from Gennaioli et al. (2013). The authors provide data on education for first-level administrative units. We assign the corresponding administrative unit to each grid cell. The results are unchanged when clustering standard errors at the administrative unit level. Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity; and caloric suitability. Personal characteristics include conqueror's age, social status, and place of origin. Precolonial characteristics include pre-colonial population density and mean pre-colonial hierarchy. The vector of individual controls includes respondent characteristics: average age, proportion of females, and proportion of individuals by social class (upper class and middle class). High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). All variables except High educ, social status, and place of origin fixed effects are standardized as to have mean 0 and standard deviation 1.

* Significant at 10%, ** significant at 5%, and *** significant at 1%.

TABLE A.6: Table 14 Controlling for Precolonial Characteristics

Dependent Variable: Share of respondents who trust

	Government (1)	Police (2)	Newspapers (3)	Government (4)	Police (5)	Newspapers (6)
High educ	-0.224 [0.665]	0.685 [0.407]	-1.104* [0.599]	-0.228 [0.629]	0.859** [0.325]	-0.946 [0.712]
Individual controls	Yes	Yes	Yes	Yes	Yes	Yes
Year of first foundation	Yes	Yes	Yes	Yes	Yes	Yes
Geographic Variables	Yes	Yes	Yes	Yes	Yes	Yes
Climate Variables	Yes	Yes	Yes	Yes	Yes	Yes
Environmental Variables	Yes	Yes	Yes	Yes	Yes	Yes
Personal Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Distance to Coast	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Precolonial Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Observations	13,742	13,742	13,742	8704	8704	8704
R-squared	0.319	0.393	0.315	0.312	0.408	0.255

Notes - Robust standard errors clustered at the conqueror level in brackets. The unit of observation is the 20 km × 20 km grid cell. In Columns (4)-(7), the sample is restricted to observation with distance to the closest Latinobarometer city < 100km. The dependent variable is the share of respondents who trust the government, the police, or newspapers (from the Latinobarometer). Geographic variables include ruggedness and fertile soil. Climate variables include average temperature and precipitation from 1961 to 1980. Environmental variables include latitude, malaria endemicity, and caloric suitability. Personal characteristics include conqueror's age, social status, and place of origin. Precolonial characteristics include pre-colonial population density and mean pre-colonial hierarchy. The vector of individual controls includes respondent characteristics: average age, proportion of females, and proportion of individuals by social class (upper class and middle class). High educ is a dummy variable that takes value 1 if education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). All variables except High educ, social status, and place of origin fixed effects are standardized as to have mean 0 and standard deviation 1.
 * Significant at 10%, ** significant at 5%, and *** significant at 1%.

C Data sources and definitions

C.1 Dependent Variables

C.1.1 Main Dependent Variable

$$\text{Log (Night Light per capita)} = \log \left(\frac{0.1 + \text{Total Night Light}}{0.1 + \text{Total Population}} \right)$$

Total Night Light. Sum of light intensity values within the 20km×20km grid cell for 2010. Source: authors’ computation using cloud-free satellite night light coverage (30 arc-second raster data from satellite F18) of the [DMSP-OLS Nighttime Lights Time Series](#) (NOAA’s National Geophysical Data Center).

Total Population. Sum of population counts within the 20km×20km grid cell for 2010. Source: authors’ computation using the [LandScan 2010 High Resolution Global Population Data Set](#) (30 arc-second raster data), copyrighted by UT-Battelle, LLC, operator of Oak Ridge National Laboratory.

C.1.2 State Capacity

Government Office. Dummy taking value 1 if there is a government office within the 20km×20km grid cell. Source: Google Maps (accessed in March 2020). Government offices are defined as offices “of a (supra)national, regional or local government agency or department.”

Police Office. Dummy taking value 1 if there is a police office within the 20km×20km grid cell. Source: Google Maps (accessed in March 2020). Police offices are defined as stations “where police officers patrol from and that is a first point of contact for civilians.”

Municipal Revenues. Natural log of average municipal revenues per km^2 for the period 2000-2009. Source: Mexican *Instituto Nacional de Estadística y Geografía* (INEGI).

Royal Revenues. Natural log of average royal revenues in a certain decade (1790-1800, 1780-1790, 1770-1780). Source: [Klein and TePaske \(1982\)](#). Check also the online accompanying project <https://realhacienda.colmex.mx/>. Note that the data do not cover islands (Cuba, Dominican Republic, Puerto Rico, Jamaica) and New Granada (Colombia, Venezuela and

Central America).

Colonial Hospitals. Number of hospitals reported in [Lopez de Velasco \(1573\)](#), [Vazquez de Espinosa \(1620\)](#), or the maximum of these two sources.

Colonial Colegios. Number of education centers (Colegios and ecclesiastical institutions) reported in [Lopez de Velasco \(1573\)](#), [Vazquez de Espinosa \(1620\)](#), or the maximum of these two sources.

C.1.3 Education and Trust

Secondary Education. Share of respondents for which secondary education is the highest level of education achieved. Source: Latinobarometer.

Average Years of Schooling. Average years of schooling among respondents. Source: Latinobarometer.

Trust. Separate variables for the share of respondents who report to trust the government, the police, or the newspapers. Source: Latinobarometer.

C.2 Geography and Climate Variables

Log Temperature. Natural log of average temperature (1961-1990) within the 20km×20km grid cell. Source: authors' computation using the [CRU TS3.10 Dataset](#) (30 arc-minute).

Log Precipitation. Natural log of average precipitation (1961-1990) within the 20km×20km grid cell. Source: authors' computation using the [CRU TS3.10 Dataset](#) (30 arc-minute).

Log Ruggedness Index. Natural log of the average ruggedness index within the 20km×20km grid cell. Source: authors' computation using grid-cell-level data (30 arc-seconds) on terrain ruggedness created by [Nunn and Puga \(2012\)](#).

% Fertile Soil. Average percentage of fertile soil within the 20km×20km grid cell. Source: authors' computation using grid-cell-level data (30 arc-second) from the [FAO Digital Soil Map of the World \(DSMW\)](#).

Distance to Coastline. Natural log of the distance (great circle distance, km) from the centroid of the 20km×20km grid cell to the closest coastline point. Source: authors'

computation using coastlines from version 3.7 of the [Gridded Population of the World \(GPW\)](#) project.

Caloric Suitability. Average caloric suitability index (potential caloric yield attainable based on the crops that were suitable for cultivation in the pre-1500 period) within the 20km×20km grid cell. Source: authors' computation using grid-cell-level data (5 arc-minute) from [Galor and Özak \(2016\)](#).

Malaria (Average Endemicity). Average malaria endemicity within the 20km×20km grid cell. Source: authors' computation using grid-cell-level data (30 arc-seconds) from [Gething et al. \(2011\)](#).

C.3 Conqueror Characteristics

High Education. Dummy variable taking value 1 if the conqueror's education equals category three (high education), and 0 if education equals category one (illiterate or no educational degree) or two (literate with technical or numerical skills). Source: authors's coding using information on the biographies of the conquerors from the *Real Academia de la Historia* ([RAH, 2018](#)) and the *Diccionario de la Historia de España* ([Bleiberg, 1979](#)). Using these sources we collected information on the education that conquerors received before going to the *Indias*. We created four categories:

- (1) **Illiterate or basic literacy (read and write)** It is directly stated that he did not know how to read and/or write; or imputed that can read and write if a close relative was literate or highly educated (for example, the uncle of Pedro de Ursúa) or he was a page in the royal court, but without any educational degree.
- (2) **Literate with technical or numerical skills** Directly stated or imputed if: Banquers or other occupations which required specific skills. It includes public officers related with the *Casa de Contratación* such as *escribanos*, *tesoreros*, *contadores*, and *factores*.
- (3) **Higher education** It is directly stated that he had university studies.

Age. Age (years) of the conqueror at the time of the conquest. Source: authors's coding

using information on the biographies of the conquerors from the *Real Academia de la Historia* (RAH, 2018) and the *Diccionario de la Historia de España* (Bleiberg, 1979).

Social Status. Discrete categories for the social status of the conqueror before going to the *Indias*: (0) if the conquerors' family had no nobility titles, including peasants; (1) for *hidalgos*, lower nobility and merchants; (2) for the aristocracy, high nobility or economic elites. Source: authors's coding using information on the biographies of the conquerors from the *Real Academia de la Historia* (RAH, 2018) and the *Diccionario de la Historia de España* (Bleiberg, 1979).

Place of Origin. Discrete categories for the region in which the conqueror was born (Andalucía, Castilla-La Nueva, Castilla-La Vieja, Extremadura, Navarra, Vascongadas, Alemania, Italia, and Portugal). Source: authors's coding. When the conqueror is from Spain, the categories correspond to the regions listed in Boyd-Bowman (1956, 1964): Andalucía, Castilla-La Nueva, Castilla-La Vieja, Extremadura, Navarra, Vascongadas. Foreign conquerors are disaggregated by country of origin.

Year of First Foundation. Year of the conqueror's first foundation in the *Indias*. Source: authors's coding using information from Montana (1943). Following the narrative, we detected which cities were founded by the conquerors. In addition, we complement the information using the *Diccionario de la Historia de España* (Bleiberg, 1979), which contains entries describing the biographies of the main conquerors, as well as De Terán (1997). Then, we read the story of each of the cities in Lopez de Velasco (1573) and Internet sources to double check who was the founder. In some cases, the city was directly founded by one of our conquerors. In others, it was founded by some other individual which could be linked to a conqueror in our list because he acted under his orders or was part of his expedition. In these cases the city is assigned to the conqueror in our list.

Tenure. Number of years from the conqueror's first foundation to the year in which he exited rule. Source: authors's coding using information on the biographies of the conquerors from RAH (2018) and González Ochoa (2003).

C.4 Precolonial Characteristics

Log Pop Density. Natural log of pre-colonial population density over 100. Source: [Maloney and Valencia \(2016\)](#) provide data on pre-colonial population density for first-level administrative units (NUTS1). We assign the corresponding administrative unit to each $20\text{km}\times 20\text{km}$ grid cell.

Mean Hierarchy. Mean hierarchy level of the pre-colonial tribes within the $20\text{km}\times 20\text{km}$ grid cell weighted by the area share of each tribe within the grid cell. Hierarchy is a categorical variable with five possible values (zero, one, two, three, or four levels of jurisdictional hierarchy beyond the local community). See section C.5 for details on the matching procedure and how we collect new information on state development for pre-colonial tribes.

Temples Dummy. Dummy taking value 1 if there is at least one pre-colonial temple within the $20\text{km}\times 20\text{km}$ grid cell, 0 otherwise. Source: authors' computation using data on temples collected by [Mayshar, Moav and Pascali \(2020\)](#) from the *Archaeological Atlas of the World*.

C.5 Precolonial Native Groups and Institutional Development

Information regarding the hierarchy levels of precolonial ethnic groups is predominantly sourced from the Ethnographic Atlas of [Murdock \(1959, 1967\)](#). We follow the literature in using the number of hierarchies or jurisdictional levels beyond the local community as a measure of state development (variable v33 in the Ethnographic Atlas). In order to link this information to the territories of the conquerors, we first overlapped the conqueror map with the Murdock Map for Latin America, which required us to geo-reference the distribution of native groups using [Murdock \(1951, 1960\)](#). In total, there were 179 unique native groups within our study region of Latin America. Unfortunately, many of the groups' names in the Murdock Map do not directly match the names of the groups in the Ethnographic Atlas (only 49 out of 179 groups could be immediately matched). For the remaining 130 groups, we used a range of sources, most notably [Steward \(1946\)](#)'s Handbook of South American Indians, in order to search for alternative names so that a match to the Ethnographic Atlas could be made. Of these groups, 13 had missing data for the hierarchy variable. We once again referred to a significant range of sources to manually assign this information, with the Handbook of South American Indians again being the primary one. This leaves us with a

total of 142 groups which we are able to provide a level of hierarchy for.

D Historical appendix

Case study: the educational levels of Pizarro and Cortés

Francisco Pizarro and Hernán Cortés are probably the two best known characters of the Spanish conquest of Latin America. This is probably because they defeated the two largest and most powerful American empires of that time: the *Inca* and the *Azteca*. Both were born in the region of Extremadura (Spain). However, a key difference between Pizarro and Cortés was their educational level. Francisco Pizarro was the bastard son of Gonzalo Pizarro and a servant of the *Monasterio de las Freilas de la Puerta de Coria*. Francisco's childhood was similar to that of any small-village child: poor but not miserable. Historical accounts suggest that he probably worked taking care of pigs and decided to go to Seville in search of fortune. All the chronicles agree that he never received a formal education and was illiterate. On the other hand, Hernán Cortés was born into non poor family. At the age of fourteen, his parents sent him to *Salamanca* to study, taking advantage of the presence there of Francisco Nuñez de Valera, a relative of his father who was grammar teacher. During his time in *Salamanca*, he acquired some skill with Latin, as well as with discourse and the law. The chronicles suggest that he probably supplemented this knowledge by working for some months as an assistant to a royal *escribano* in *Valladolid* (Spain).

Case study: level 1 and level 2 conquerors in the conquest of Cuba

In 1511, Diego de Velázquez was appointed captain and lieutenant by Diego Colón, son of Cristóbal Colón, with orders to conquer and populate the island of Cuba. Velázquez was not D. Colón's first choice, but the king blocked his attempt to assign the conquest to his uncle Bartolomé Colón. Velázquez organized and financed the expedition himself and managed to found several cities such as *Aunci6n de Baracoa*, *San Salvador de Bayamo*, and *Santiago de Cuba*. However, he died in 1525 without being granted the *gubernaci6n* of Cuba by the King. Following our methodology, Velázquez will be considered a level 2 conqueror in the region of Cuba, even though he was governor *de facto* of the island for some years, because

his “conquest rights” did not emerge directly from the King but from another conqueror (D. Colón), who ended up setting the institutional foundations of the conquest. Velázquez never got a *capitulación* or a title of *gobernador* for Cuba; he conquered and ruled as the lieutenant of D. Colón. This example illustrates the complicated interplay of powers, rights, and legitimacy that was the early period of the Spanish conquest of Latin America, and how the methodology helps us consistently classify complicated cases.

FIGURE A.1: Río de la Plata and Chile

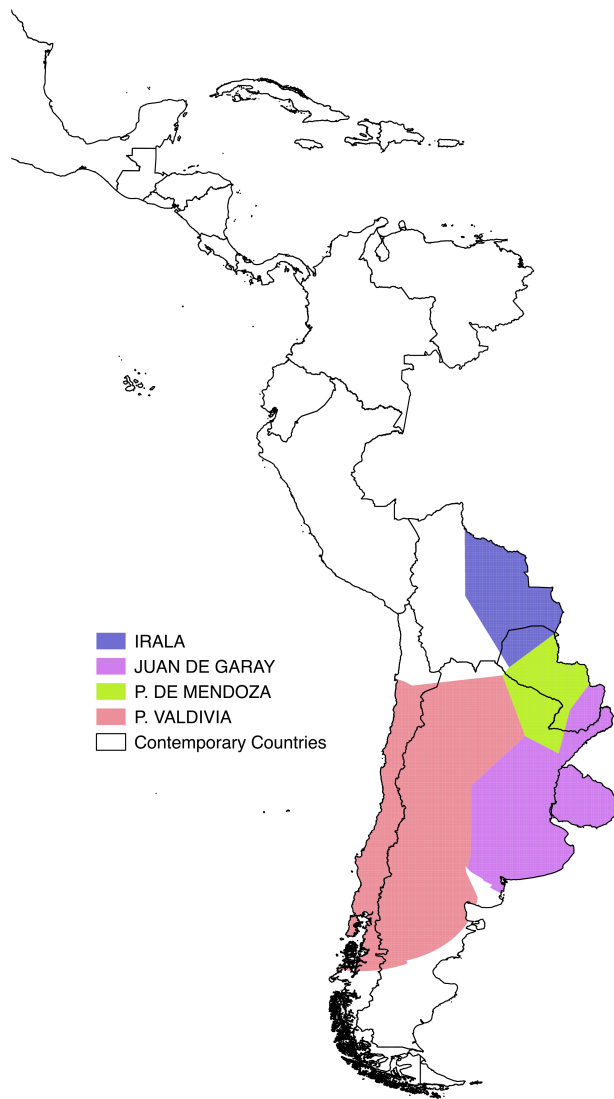


FIGURE A.2: Perú

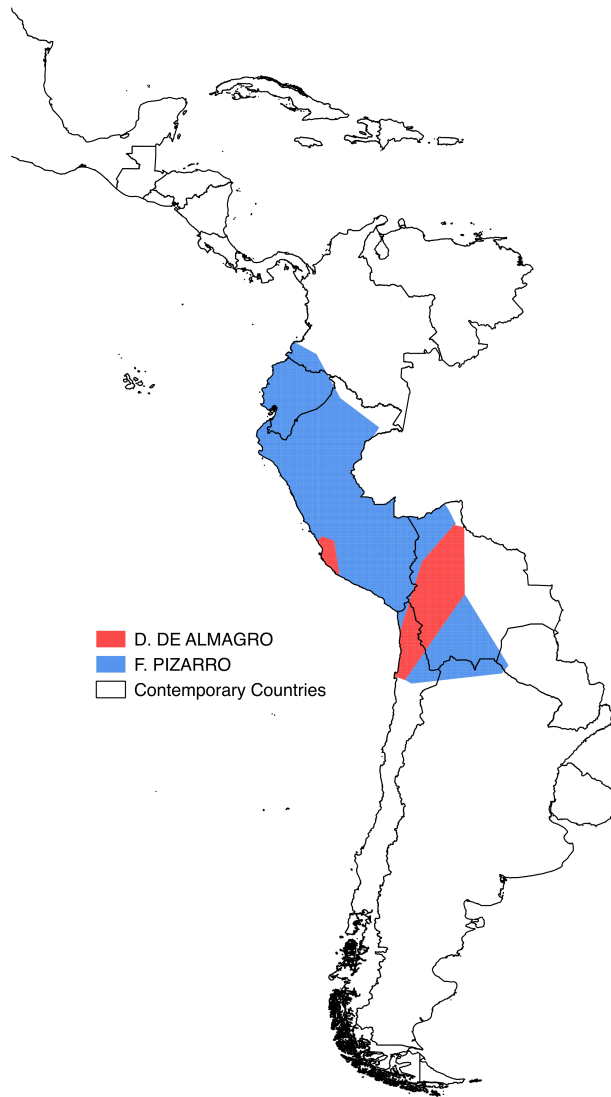


FIGURE A.3: Colombia and Venezuela

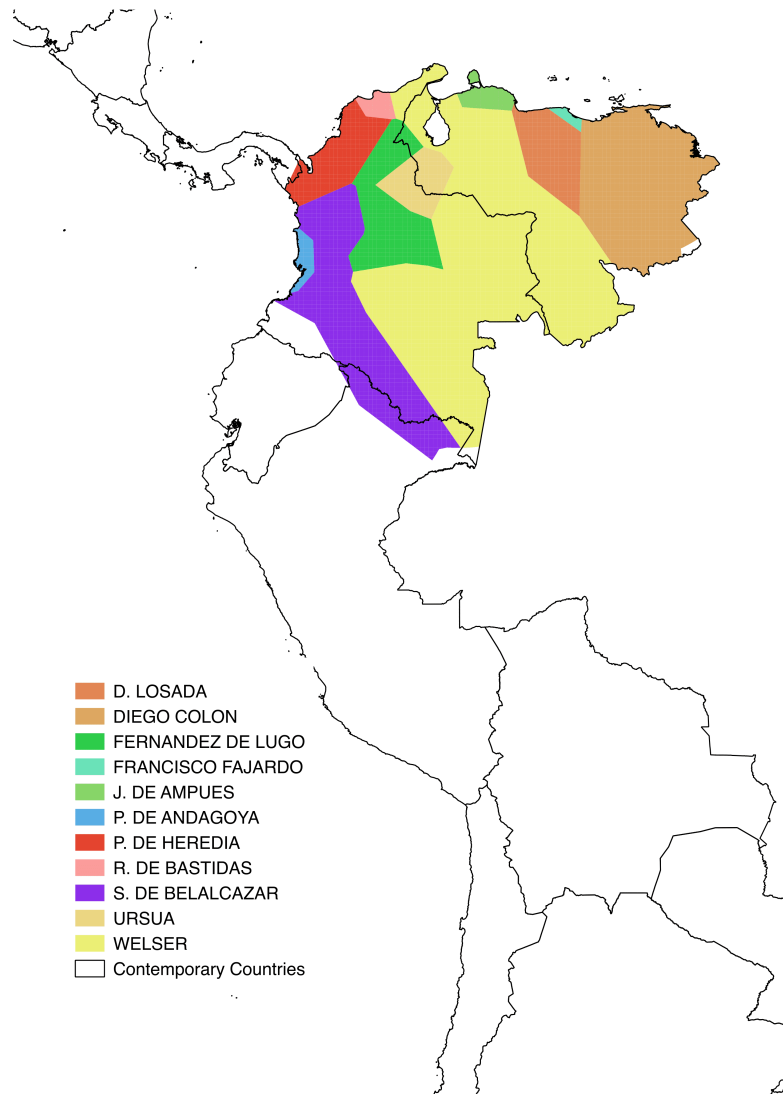


FIGURE A.4: Mexico and Guatemala

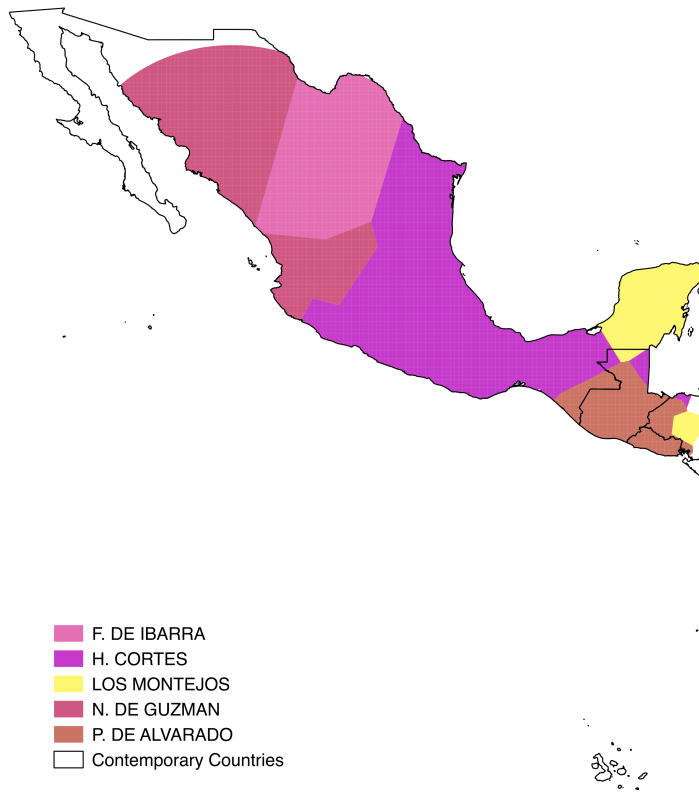
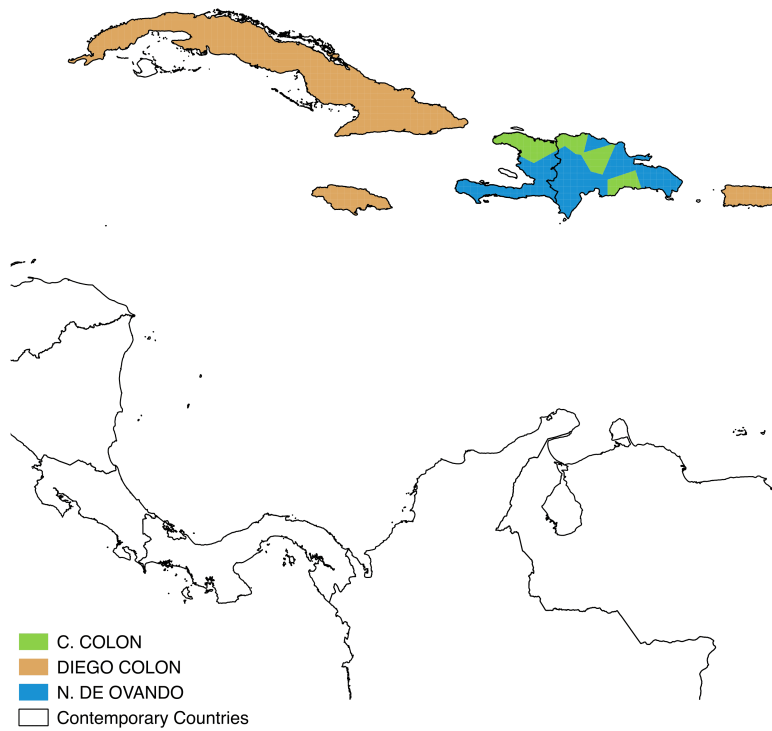


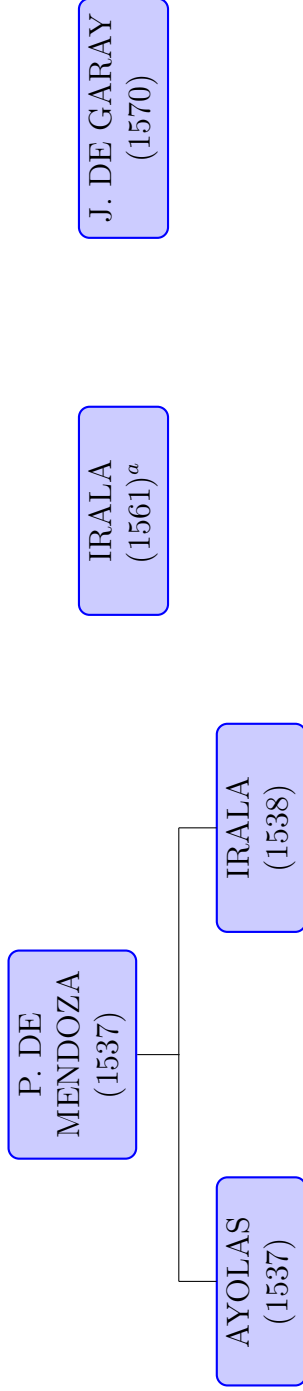
FIGURE A.5: Honduras and Castilla del Oro



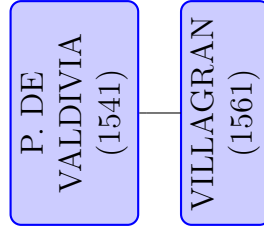
FIGURE A.6: La Española, Cuba, Puerto Rico and Jamaica



Conquest of Río de la Plata



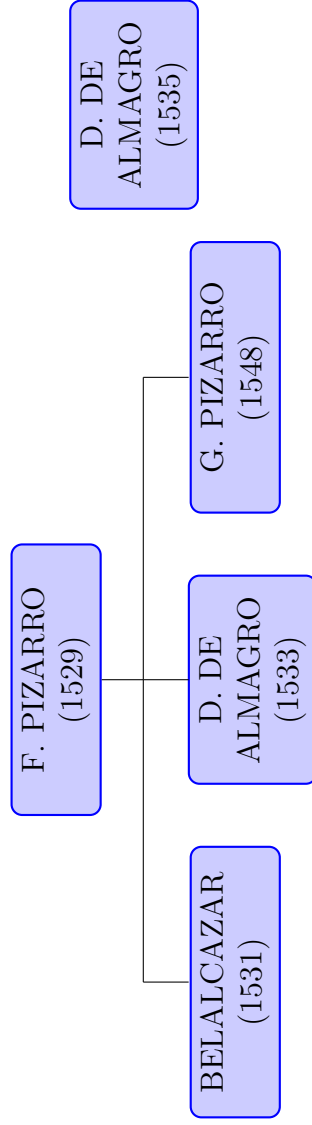
Conquest of Chile



Notes. Years in parentheses refer to the first foundation of the conqueror. In the conquest of Río de la Plata, level 1 conquerors are: Pedro de Mendoza (Granada (Spain), 1499 - Atlantic Ocean, 1537); Domingo Martínez de Irala (Guipúzcoa (Spain), 1506 - Asunción (Paraguay), 1556); and Juan de Garay (Vizcaya (Spain), 1528 - Río de la Plata (Argentina), 1583). Level 2 conquerors are Juan de Ayolas (Burgos (Spain), 1510 - Chaco (Paraguay), 1538); and Domingo Martínez de Irala, who appears later as level 1. In the conquest of Chile, Pedro de Valdivia (Badajoz (Spain), c. 1500 - Tucapel (Chile), 1553) appears as level 1 and Francisco de Villagrán (Leon (Spain), 1511 - Concepción (Chile), 1563) as level 2. See *Real Academia de la Historia (RAH, 2018)* for more details on the biographies of conquerors. ^aThe year 1561 corresponds to the foundation of Santa Cruz de la Sierra by Ñuño de Chávez, whose expedition was planned by Irala (level 1) in 1556.

FIGURE A.7: Río de la Plata and Chile

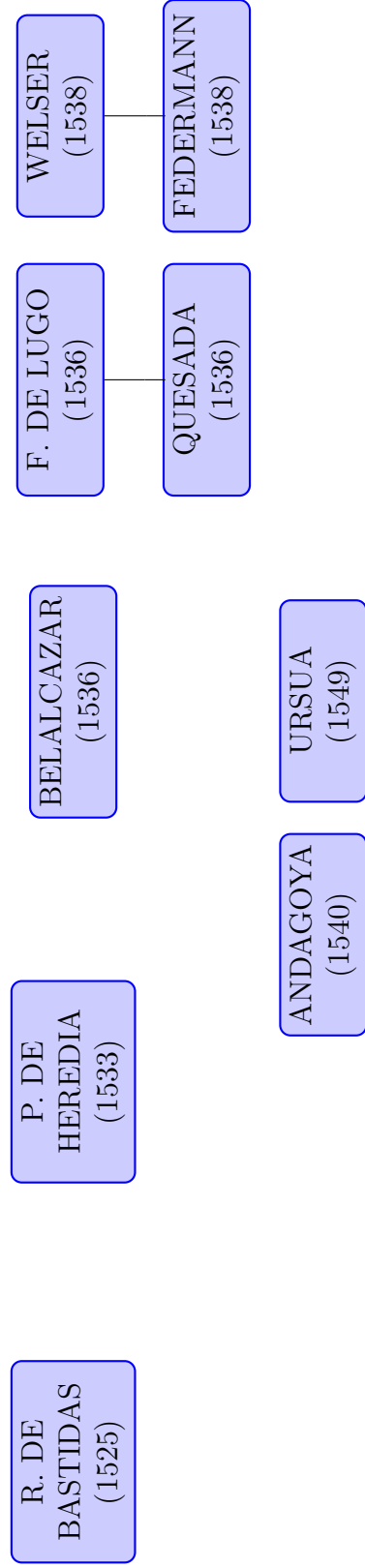
Conquest of Perú



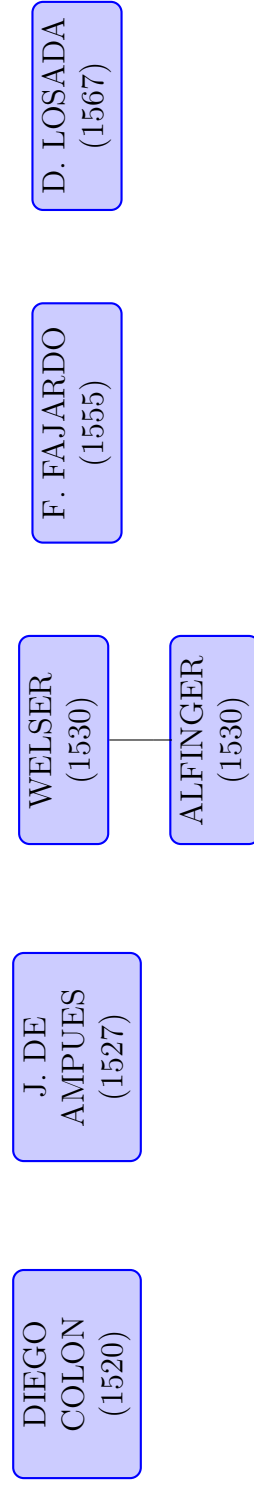
Notes. Years in parentheses refer to the first foundation of the conqueror. Level 1 conquerors are Francisco Pizarro (Cáceres (Spain), 1478 - Lima (Perú) 1541); and Diego de Almagro (Ciudad Real (Spain), 1480 - Cuzco (Perú), 1538). Level 2 conquerors are Sebastián de Belalcázar (Córdoba (Spain), 1490 - Cartagena (Colombia), 1551); Gonzalo Pizarro (Cáceres (Spain), 1510 - Jaquijahuana (Perú), 1548); and Diego de Almagro, who appears later as level 1. See *Real Academia de la Historia (RAH, 2018)* for more details on the biographies of conquerors.

FIGURE A.8: Perú

Conquest of Colombia



Conquest of Venezuela



Notes. Years in parentheses refer to the first foundation of the conqueror. Level 1 conquerors in the conquest of Colombia are: Rodrigo de Bastidas (Sevilla (Spain), 1473 - Santiago (Cuba), 1527); Pedro de Heredia (Madrid (Spain), c. 1500 - Guadaluquivir River, 1555); Sebastián de Belalcázar (Córdoba (Spain), 1490 - Cartagena (Colombia), 1551); Fernández de Lugo (Sevilla (Spain), 1475 - Santa Marta (Colombia), 1536); Bartolome Welser (Germany, 1484 - German, 1561); Pascual de Andagoya (Álava (Spain), 1498 - Cuzco (Perú), 1548); and Pedro de Ursúa (Navarra (Spain), 1526 - Bolivian Amazon, 1561). Level 2 conquerors are Gonzalo Jiménez de Quesada (Córdoba (Spain), 1506 - Mariquita (Colombia), 1579); and Nicolaus Federmann (Ulm (Germany), 1505 - Valladolid (Spain), 1542). In the conquest of Venezuela, level 1 conquerors are: Diego Colón (Porto Santo (Portugal), 1482 - Toledo (Spain), 1526); Juan de Ampúes (Zaragoza (Spain), 1450 - Santo Domingo (Dominican Republic), 1533); Bartolome Welser (Germany, 1484 - German, 1561); Francisco Fajardo (Margarita (Venezuela), 1530 - Cumaná (Venezuela), 1564); and Diego de Losada (Zamora (Spain), 1511 - Tocuyo (Venezuela), 1570). Ambrosio Alfinger (Ulm (Germany), c. 1500 - Chinácota (Colombia), 1533) appears as level 2. See *Real Academia de la Historia* (RAH, 2018) for more details on the biographies of conquerors.

FIGURE A.9: Colombia and Venezuela

Conquest of Mexico

H. CORTES
(1519)

N. DE
GUZMAN
(1529)

LOS
MONTEJO
(1540)

F. DE
IBARRA
(1563)

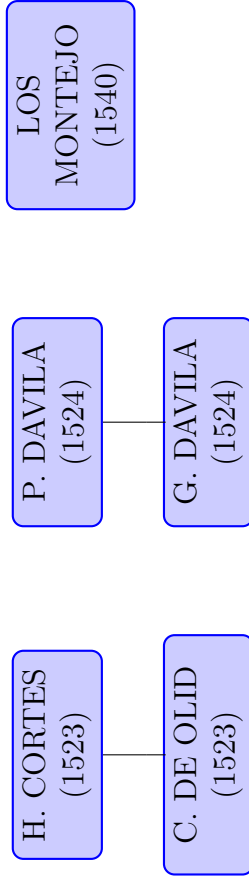
Conquest of Guatemala

P. DE
ALVARADO
(1524)

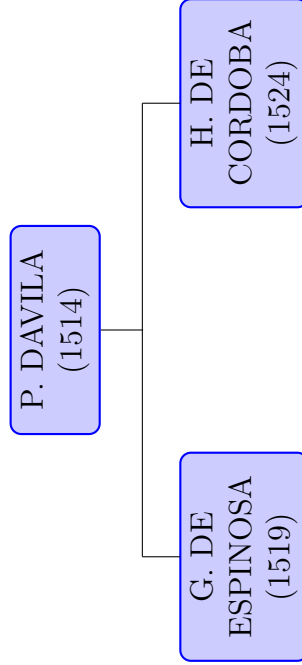
Notes. Years in parentheses refer to the first foundation of the conqueror. Level 1 conquerors in the conquest of Mexico are: Hernán Cortés (Badajoz (Spain), 1485 - Sevilla (Spain), 1547); Nuño de Guzmán (Guadalajara (Spain), 1490 - Valladolid (Spain), 1558); Francisco de Montejo (Salamanca (Spain), 1473 - Sevilla (Spain), 1553); and Francisco de Ibarra (Vizcaya (Spain), 1539 - Chiametia (Mexico), 1575). In the conquest of Guatemala, Pedro de Alvarado (Badajoz (Spain), 1485 - Guadalajara (Mexico), 1541) appears as level 1. See *Real Academia de la Historia* (RAH, 2018) for more details on the biographies of conquerors.

FIGURE A.10: Mexico and Guatemala

Conquest of Honduras



Conquest of Castilla del Oro



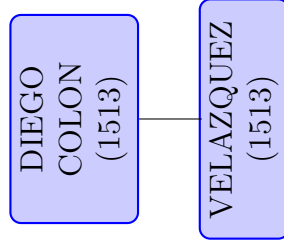
Notes. Years in parentheses refer to the first foundation of the conqueror. Level 1 conquerors in the conquest of Honduras are: Hernán Cortés (Badajoz (Spain), 1485 - Sevilla (Spain), 1547); Pedrarias Dávila (Segovia (Spain), 1440 - León (Nicaragua), 1531); and Francisco de Montejo (Salamanca (Spain), 1473 - Sevilla (Spain), 1553). Level 2 conquerors are Cristóbal de Olid (Jaén (Spain), 1488 - Naco (Honduras), 1525); and Gil González Dávila (Ávila (Spain), 1480 - Ávila (Spain), 1526). In the conquest of Castilla del Oro, Pedrarias Dávila (Segovia (Spain), 1440 - León (Nicaragua), 1531) appears as level 1. Level 2 conquerors are: Gaspar de Espinosa (Valladolid (Spain), 1475 - Cusco (Perú), 1537); and Francisco Hernández de Córdoba (? - León (Nicaragua), 1526). See *Real Academia de la Historia (RAH, 2018)* for more details on the biographies of conquerors.

FIGURE A.11: Honduras and Castilla del Oro

Conquest of La Española



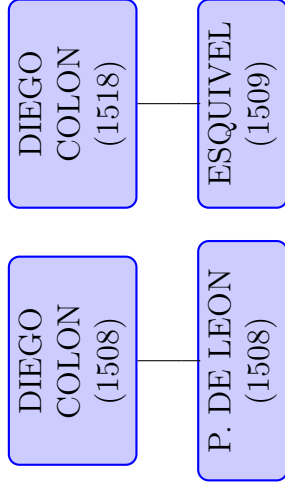
Conquest of Cuba



Notes. Years in parentheses refer to the first foundation of the conqueror. Level 1 conquerors in the conquest of La Española are Cristóbal Colón (Genova (Italy), 1451 - Valladolid (Spain), 1506); and Nicolás de Ovando (Cáceres (Spain), 1451 - Sevilla (Spain), 1511). In the conquest of Cuba, Diego Colón (Porto Santo (Portugal), 1482 - Toledo (Spain), 1526) appears as level 1 and Diego Velázquez (Segovia (Spain), 1464 - Santiago (Cuba), 1524) as level 2. See *Real Academia de la Historia* (RAH, 2018) for more details on the biographies of conquerors.

FIGURE A.12: La Española and Cuba

Conquest of Puerto Rico and Jamaica



Notes. Years in parentheses refer to the first foundation of the conqueror. In the conquest of Puerto Rico, Diego Colón (Porto Santo (Portugal), 1482 - Toledo (Spain), 1526) appears as level 1 and Juan Ponce de León (Valladolid (Spain), 1465 - La Habana (Cuba), 1521) as level 2. In the conquest of Jamaica, Diego Colón (Porto Santo (Portugal), 1482 - Toledo (Spain), 1526) appears as level 1 and Juan de Esquivel (Sevilla (Spain), 1465 - Jamaica, 1513) as level 2. See *Real Academia de la Historia* (RAH, 2018) for more details on the biographies of conquerors.

FIGURE A.13: Puerto Rico and Jamaica