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The Legacy of the Spanish *Conquista* in the Andes:

Mining Mita, Persistent Social Unrest, and Cultural Divergence

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Abstract*

This paper studies the persistent effect on social unrest of the Mining Mita— a colonial forced labor and migration institution that affected indigenous communities in Peru between 1573 to 1811. Using a geographical regression discontinuity design for identification, we provide causal evidence that Mita areas have experienced higher levels of social unrest since the end of the 18th century. We present a simple conceptual rationale with historical and causal evidence indicating that at least part of the roots of such persistence is cultural. Specifically, people living in Mita districts identify more with the indigenous groups and indigenous institutions, are more likely to speak native languages, are less likely to migrate, and have different beliefs about development and democracy.

JEL Codes: D74, I38, J15, N26, O10, O43, P14, Z10

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1. Introduction

Conflict and social unrest have gained interest in development economics as critical determinants of long-run economic development (e.g., Blattman, 2022; Esteban & Ray, 2017; Blattman & Miguel, 2010). Also, there is an increasingly wider recognition of the relevance of the effects of historical events on modern-day outcomes, indicating that these effects can be persistent (Bisin & Federico, 2021; Nunn, 2020). In this paper, we revisit the case of the Mining Mita along the lines of its potential effects on social unrest and conflict. The mining Mita was a colonial forced-labor institution in the Peruvian Andes created in 1573. The main feature of the Mita system is that it required certain areas in colonial Peru to send one-seventh of their working-age male population to work in two mining areas (Potosi and Huancavelica) every year.[1] We use a Geographical Regression Discontinuity (GRD) design and find that the Mita system has a causal effect on social unrest at different times in Peruvian history. This identification strategy allows us to compare areas with the same cultural, economic, geographic, and climate factors before the mining Mita was implemented.

We present quantitative evidence of the effects on conflict for three different moments. The first was in the late 18th century when the native leader *Tupac Amaru II* led the largest indigenous anti-colonial rebellion in the history of the Spanish colony. We find that participation in the uprising was primarily concentrated in the Mita districts.[2] The second episode is the period of internal conflict between guerrilla groups and the Peruvian government during the 1980s and 1990s. Mita districts again were more likely to experience a violent event than the counterfactual group during this conflict. Our third period of analysis occurs during the past two decades when Peru experienced fast economic growth and enjoyed the most extended democratic period in its history. In the meantime, the mining industry expanded significantly throughout the country but faced resistance from the local population through violent protests and manifestations. We show that Mita districts were more likely to experience these anti-mining events.

[1] The Mita was previously studied by Dell (2010), who finds that this institution negatively affected economic welfare in the long run, even 250 years after its abolition. Natividad (2019) finds similar results at the firm level and Carpio & Guerrero (2021) find evidence of a demographic collapse soon after its implementation.

[2] The historical literature documents that one of the main demands of the rebels was the abolition of the Mita. At the same time, the indigenous people who opposed the rebellion feared that, should the rebels lose, they would be forced to move to the Mita area as punishment (Walker, 2014, O'Phelan, 2012, Stavig, 1999).

Then, in order to study the hypothesis that a cultural divergence caused by the Mita is behind the persistent social unrest in different periods of Peruvian history, we use the conceptual framework provided by Acemoglu and Robinson (2021) to motivate and study this channel. Culture can be understood as a *set* of *cultural attributes* that can be wired together to form *cultural configurations.* The *set* is persistent in time, but the *configurations* can change depending on the context to adapt to shocks that create threats or opportunities for the community's survival. We argue that before the installation of the Mita, both areas were culturally identical, and this institution, due to its intensity and duration, altered social interactions permanently.

To support this, we rely on the work of Stavig (1999) and Jacobsen (1993), who gathered an enormous amount of qualitative historical evidence on Mita-affected provinces around the time of the *Tupac Amaru* Rebellion.[3] Notably, they both emphasize how essential the maintenance of the local indigenous identity was. Stavig (1999) argues that due to the harsh economic conditions imposed by the Mita, local people needed to rely heavily on the community's support. In turn, Jacobsen (1993) remarks on the persistence of the cultural connections forged during the colonial times and how they kept affecting the lives after the end of the colonial rule, which included the Mita system. Finally, they mention social unrest as a critical latent characteristic in the area and help us understand how profound the institution's cultural effects have been.

We then present quantitative evidence that supports this hypothesis. When comparing both treated and control groups in the present time, we find significant differences in Mita areas, as compared to the control group, in (i) the share of people that identifies with indigenous ethnic groups, (ii) the percentage who speak a native language as their mother tongue, (iii) the percentage of the population and agricultural land that belong to peasant communities,[4] and (iv) levels of identification with peasant communities (vis-à-vis) the rest of the country's administrative levels. These results suggest that the Mita system created stronger and lasting bonds between the population and these local indigenous institutions.

[3] Stavig's work covered the years before, and Jacobsen's the years after the rebellion.

[4] Peasant communities are a type of present-day indigenous institution that has their roots in pre-colonial times (some historians argue that they exist even since pre-Incan times).

Consistent with the previous results, we find that Mita districts receive fewer immigration and emigration rates. This result supports the idea that people in these districts are less interested in going away from the community and seem less welcoming to outsiders for more opportunities. With these results, we argue that while the Mita districts are more united, they are also less open to the outside, either as migrants themselves or as receptors of migrants.

Finally, we turn to study differences in beliefs about several dimensions that can help explain why social unrest is more substantial in Mita districts. People in Mita areas identify different causes of economic development than people living in control areas. Interestingly, people in Mita districts are more likely to blame their colonial heritage as the primary cause of lower economic growth than non-Mita areas. They also report less knowledge about what democracy means and consider it less beneficial for their wellbeing.

Our results are robust to different exercises. First, we deal with the most logical alternative explanation to our results: that social unrest is a consequence of the Mita effects on economic development, which could also explain the impact on beliefs and migration. Although there is no direct way to discard this concern, our results on social unrest hold even when we control for income proxies and are robust to the inclusion of weather shocks that affect income. Therefore, this alternative explanation seems unlikely. Second, we consider the alternative rationale that the Mita system reduced the provision of public goods, as was previously argued by Dell (2010). We provide evidence of no difference in public education provision or road density in the present. So, even if it is plausible that they did have an effect in the past, it is unlikely that they can explain present-day social unrest.

Our paper contributes to several strands of the economics literature. First, we contribute to the literature on historical determinants of social unrest and conflict (e.g., Acemoglu et al., 2020; Arbatli et al., 2020; Guardado, 2018; Michalopoulos and Papaioannou, 2016; Besley and Reynal-Querol, 2014; Esteban et al., 2012; Dincecco et al. 2021; Cao et al. 2020; McGuirk and Nunn, 2020; Depetris-Chauvin and Ozak, 2020; Iyigun et al. 2017). Most of the literature provides evidence of the long-term effects of historical events on social unrest or conflict. Ours is, to our knowledge, the first to show persistence in different moments in time.

Second, we add to the growing body of research on the impact of historical institutions on present-day attitudes, beliefs about democracy, causes of long-run development, and self-identification with local indigenous communities (Lowes and Montero, 2021a; Lowes and Montero, 2021b; Valencia, 2019; Dell et al. 2018; Lowes et al. 2017; Becker et al., 2016; Guiso et al. 2016; Grosfeld and Zhuravskaya, 2015; Alesina et al. 2013; Voigtländer and Voth, 2012, Nunn and Wantchekon, 2011, among others). For the case of Latin American Countries (LAC), this is very relevant because the Spanish colonial rule in LAC was more extended than any other in the rest of the world. Interestingly, our results are related to those in Lowes and Montero (2021a), who found that the Belgian rule in the Congo affected how people identify with their local communities.

Finally, we also contribute to the now vast literature that examines the long-term effect of colonialism on different modern outcomes, as well as the role of institutions and culture as mechanisms (literature reviews can be found in Giuliano and Nunn, 2021; Acemoglu and Robinson, 2021; Bisin and Federico, 2021; Voth, 2021; Alesina and Giuliano, 2015; Acemoglu and Robinson, 2012).

2. Historical Background and Context

2.1 The Mining Mita and Colonial Mining[5]

The Mining Mita was created in 1573 by Viceroy Francisco de Toledo during the Spanish occupation. Affected communities had to send one-seventh of the adult males to work in either the Potosi or the Huancavelica mines every year. It lasted around 240 years until 1812.[6]

[5] Most of the information in this section is based on the detailed and comprehensive work of Cole (1985), Bakewell (1984), Tandeter (1983), Stavig (1999), and Tantalean (2011) on the history of the Mining Mita and its effects on the affected population.

[6] The original idea was to make the Mita less damaging to the indigenous communities. People should be paid a fair remuneration for their work, provided with enough rest during the week, and even get compensation for the long trips (which could take up to three months from some provinces). Also, since it only affected one-seventh of the population per year, the idea was that after one individual had fulfilled his Mita obligation, he would rest the other six years until his next shift. In practice, the payment they received was insufficient to cover even their most basic needs, and they did not receive enough compensation for the trip, so they needed to save during the years with no service to the Mita for the moment when they had to go. Also, once in the mines, the workload was exhausting, so they had to travel with members of their families to help them survive. Also, they had to bring to Potosi or Huancavelica goods to sell to afford the expensive cost of living in those cities. Finally, if the family or community had the resources, they used their money to pay the equivalent price of a free worker to the miners. Still, this alternative was costly, so very few could do this, and when they did, it was because going to the mines was considered a death sentence due to the physical problems caused by the Mita forced-labor system.

There were several factors leading to the creation of the Mita system. First, the discovery of the Huancavelica mercury mine in 1571. This event was critical given the discovery in 1555 of the silver extractions using amalgamation with mercury, which dramatically reduced the costs of extracting silver in the Andes. Second, the geographical conditions of Potosi made its exploitation difficult and disabled the use of enslaved people due to their high mortality at high elevations. Third, the amalgamation method needs many workers to ensure the production of both silver and mercury, and the scarcity of volunteers or enslaved people makes the local population the only option.

These characteristics might also explain why only a fraction of the indigenous population was forced into labor. The intention was to provide only enough labor force for the mines to be profitable, not to enslave the native population. Note that the Mita system was a rare institution in the Spanish colonization. Economic historians have extensively documented the critical importance of the Potosi and Huancavelica mines as central to the Spanish colonies' economic and political stability and the increasing wealth in Spain during the 16th and 17th centuries.

In Figure 1, we present two maps showing this. We can observe the geographic conditions around the Mita areas in the left panel. For instance, these areas are located at higher altitudes. In the right panel, we present the boundaries of the former Inca Empire in green since they also limited the area colonized by the Spanish. We see the areas subject to the Mining Mita of Huancavelica and Potosi in pink and light blue.

HERE FIGURE 1

2.2 The Tupac Amaru II Rebellion (1780-1783)[7]

The *Great Rebellion* of Jose Gabriel Condorcanqui Noguera, also called Inca Tupac Amaru II,[8] started on November 4, 1780, when the rebels captured Antonio de Arriaga, the local colonial administrator (*"Corregidor"*), who was publicly executed by the insurgents five days later.

[7] Most of the information in this section is based on the detailed and comprehensive work of Walker (2014), Golte (2016), O'Phelan (2012), and Stavig (1999).
[8] *Tupac Amaru I* was the name of the last Inca, executed in 1572 by Viceroy Francisco Toledo. Jose Gabriel claimed that he was his descendant, claimed the title of Inca, and took the same name. Jose Gabriel was the local indigenous leader ("cacique") of Surimana, Tungasuca and Pampamarca.

The rebellion then proceeded in an unorderly way. A critical event was the unexpected capture and execution of Jose Gabriel on May 18, 1781. This event limited the expansion of the uprising since the rebellion lost its leader, and the capture was due to its own military mistake. After Jose Gabriel's capture, the revolution was about to become out of control. The central branch of the rebellion was continued by people close (friends and relatives) to Jose Gabriel. The most important leader was his cousin, Diego Cristobal, who also changed his name to Diego *Tupac Amaru*. He led the revolution for almost two years until his execution in July 1783.[9]

The rebellion took place during the years of implementing the Bourbonic Reforms, which involved ending privileges of local *caciques* and increasing taxes for indigenous communities. Jose Gabriel was likely motivated by the risk of losing his cacicazgo due to these reforms. Historians have suggested that his original goal was merely to change those policies. However, the overall population was unhappy with their colonizers, which fueled the rebellion, as did nostalgia from the Incan empire. However, contrary to what Tupac Amaru and royalists expected, support for the uprising was not generalized among *caciques,* and they even supported royalists from the very beginning of the rebellion.

A critical factor in understanding this heterogeneity seems to be the Mining Mita institution. Although one of the most popular demands of the rebels was its abolition, Jose Gabriel was *cacique* of two areas assigned to the Mita (Tungasuca and Pampamarca). Historians have argued that the fear of being transferred to the Mita as punishment for supporting the uprising was even more critical.[10]

2.3. Peruvian Internal Conflict (1980-1993)[11]

The Peruvian Internal Conflict started on May 17, 1980, burning ballot boxes for the presidential election in a small town in rural Peru. However, this event was not spontaneous but was carefully prepared for many years by the extreme-left terrorist group "The Shining Path (SP)." Peru was in the process of returning to a democratic government

[9] This rebellion also inspired the most significant uprising in the Viceroyalty of Rio de la Plata, led by Julio Apaza Catari, who called himself Tupac Katari and was defeated and executed in 1781. The definitive end of all subsequent rebellions is challenging to determine. Still, it is at least related to these leaders' executions since the Spaniards also executed or exiled their family members to avoid future rebellions.
[10] This fear was proven correct since after the end of the Tupac Katari rebellion, the community of Chayanta, which supported the rebellion, was subjected to the Mining Mita.
[11] Most of the information in this section is based on the previous work of CVR (2004), Degregori (2012), and Gorriti (2017), who made a detailed compilation of actions and events during this period.

after 12 years of a military dictatorship, and the new government was noticeably unprepared for dealing with the extreme violent strategies of SP. Although there were still violent events until 1999, it is commonly assumed that the end of the period of this conflict was the unexpected capture of the SP leader, Abimael Guzman, in 1993, together with most of the high command of the group.

The state and its institutions were virtually non-existent in the rural countryside. These guerrillas created "liberated zones," presenting themselves as the new authorities, demanding supplies and fighters from the local population (peasant communities, local mayors, families). The methods used were highly violent, including torture, kidnapping, and assassination. When the police and the army entered these zones, the terrorists camouflaged themselves among the locals and threatened death and torture for the government's betrayal. Along with the fear locals had of the terrorists, many only spoke Quechua, their indigenous language, making it hard to know if locals were conspiring with the terrorists. The extreme violence the terrorists used against police and local authorities led to reprisal violence against local populations by the police and the army. Of course, counter-terrorist violence worsened local feelings about the state, thus improving the image of terrorist groups and increasing adherence to them.[12]

Note also that historians and social scientists who have studied and documented this war mention that, at the start of the conflict, SP was positively perceived by the local population, but adherence was heterogeneous. It was more prominent in areas where the state was absent and where historical and current grievances with elites (like landlords) or the state were more prevalent. This is important to understand our results of higher violence (as a proxy for adherence to the rebels) in Mita districts.

2.4. Modern Anti-Mining Protests

During the past three decades, Peru has gone through its most prolonged period of economic growth. The mining sector was critical for this. Coming from being almost

[12] The number of deaths due to this conflict is estimated to be around 70,000 people, making it the bloodiest event in the history of the country since its independence.

irrelevant in the 1990s, it has become the most important contributor to exports and foreign direct investment in the country until now.

While previous empirical evidence suggests positive effects of the mining boom on local communities,[13] it is notable that opposition to mining was the leading cause of protests in the local mining areas. The most prevalent reasons for these protests are environmental and redistributive complaints. It is worth noting that a significant part of the Peruvian anti-mining protests is led by local peasant communities and receives extensive support from the rest of the local population. One of their primary complaints is that mining pollution affects agriculture (Arellano-Yanguas, 2011, Orihuela et al. 2019). People in these areas tend to be farmers; 63% of households depend economically on agriculture (93% in rural areas). On average, 36% of their income comes from farming (58% in rural areas).

Naturally, these protests are very different from the Tupac Amaru rebellion and the Internal Conflict, but we consider them to be another manifestation of social unrest. In the context of a more robust democracy and economic growth, the most natural way for the turmoil to present is as spontaneous unconnected protests. According to our data, at least 22% of the protest events ended with fatalities, and 39% faced police repression.[14]

3. Data

3.1 Data for the Geographic Regression Discontinuity Design

The data used to implement our GRD design comes from the replication files of Dell (2010).[15] Specifically the polynomials of the distance to the Mita boundary, the Potosí mine, and longitude and latitude. Also, the control variables used in her paper, such as altitude, slope, and segment fixed effects. In addition, we include additional data to validate geographic and climatic comparability. First, we add data on temperature and precipitation from the Climatic Research Unit of East Anglia University.[16] Secondly, we use data on the estimated population and land crop area for the year 1500 obtained from

[13] See Loayza and Rigolini (2016).
[14] Also, the political consequences of the protests could be important, as in the case of the "Baguazo", a protest against the oil company "Petro Perú" by Amazonian native communities. It ended with 33 deaths and caused significant losses for the company (The Economist, 2009).
[15] Available at: https://www.econometricsociety.org/content/supplement-persistent-effects-perus-mining-mita-0.
[16] Available at: https://www.uea.ac.uk/web/groups-and-centres/climatic-research-unit/data

Golderwijk et al. (2010).[17] We then construct the population density in the district and the cropland share of the area's land.[18] We include them as control variables in all GRD estimations.

3.2 Outcome Data for GRD design estimations

Tupac Amaru Rebellion Data: To estimate local support for the Tupac Amaru II rebellion of 1780-1783, we rely on two sources: O'Phelan (2012) and Morner and Trelles (1986). From O'Phelan (2012), we obtained a list of the towns where the insurgents were born or resided before the uprising. The assumption is that leaders of the rebellion lived in the areas with more vigorous support for the insurgency. We use the complete list of the accused, even those who were not found guilty.

Finally, the last proxy comes from the previous work of Morner and Trelles (1986) but is only available for districts in the Cuzco region. They collected data on support for the rebellion of Tupac Amaru based on the historical correspondence of the rebels and royalist factions at the village level. They labeled a town as "rebel" if it was mentioned in the documents that either the local leader, cacique, or the town supported the rebellion. Instead, they labeled it as "loyal" if they supported the royalists. Using this information, we created an index of support/rejection for the rebellion.[19]

As a robustness check, we use two different intensity measures of conflict at the district level from O'Phelan (2012). All authors use two compilations of historical documents: CDIP (1971) and CDBRETA (1980). Both included numerous volumes of historical documentation such as letters, sentences, official orders, etc.

All these data are at the historical town level. We manually looked at each town in modern districts to make them compatible with present-day municipalities. Thanks to the persistence in the towns' names in the Peruvian Andes, we could identify nearly all of

[17] Available at: https://onlinelibrary.wiley.com/doi/10.1111/j.1466-8238.2010.00587.x
[18] Ideally, we would like to have included actual data, not estimated one, but the only data on the pre-colonial population available prior to the installation of the Mita is at the regional level (eg, Bruhn and Gallego, 2012).
[19] The index takes the value of "-2" if both the community and the *cacique* were on the loyalist side, "-1" if only one of them did, "0" if they were at odds or if none of them supported any side. Finally, "+1" and "+2" represented mild or strong support for the rebellion.

them.[20] We then construct a dummy variable indicating whether the district supported the rebellion.

<u>Modern Social Unrest Data:</u> The data from the Internal Conflict between 1980 and 2000 come from the database compiled by the Peruvian Truth and Reconciliation Commission (CVR, 2004). It contains all the conflict events with at least a victim or witness. We find direct information on 23,000 deaths and disappearances caused by the conflict. We construct a dummy that takes the value of one if at least one violent event occurred in the district.

Data on anti-mining protests come from the Ombudsman office's monthly reports, "*Reporte de Conflictos Sociales,*" from 2004 to 2017. They are available on their website.[21] The dataset includes information on 476 different social conflicts collected, 166 of which are anti-mining. We then create a dummy indicating whether there is at least one anti-mining conflict in the district at any moment.

<u>Beliefs and Mother Language Data:</u> Data on beliefs about identity and mother tongue comes from the microdata of the National Population Census of 2017, which is available upon request. In this case, we present the percentage of the population in the district that identifies the most with the following groups: indigenous, *mestizo*, white, or other. Similarly, data on the share who speak a native language is presented at the district level for 1961, 1981, and 2017. For 1981, the microdata is available upon request. Data from 1961 was hand-coded from DNEC (1965).

We use the Opinions Questionnaire of the National Household Survey (ENAHO) from 2018 for the outcomes related to beliefs about democracy. We use the 2006 version of this survey for opinions about the causes of economic development since this is the last version that included this question.

<u>Land Tenure and Peasant Communities Data</u>: We use microdata from the National Household Survey (ENAHO) from 2018 for the outcomes related to the beliefs of

[20] We use the compatibilization of modern districts to historical ones in Huaroto (2022).

[21] Available at: https://www.defensoria.gob.pe/categorias_de_documentos/reportes/. The Ombudsman's definition of "social conflict" is: "a complex process in which sectors of the society, the state, and firms perceive their positions, interest, objectives, values, beliefs or necessities as contradictory. This process creates a situation that could derive in violence." and hand-coded into a dataset by Prof. Jose C. Orihuela from the Catholic University of Peru, who generously shared the data with us.

identification with peasant communities. We also use microdata from the 2012 National Agricultural Census for the share of the land in the districts in the hands of these communities. Finally, we use the database of Indigenous and Native Peoples (DINP) to obtain the number of peasant communities, the number of members of each community, and its legal status.

Migration Data: We use the microdata of the last census of the country, collected in 2017. In particular, we use the question: "in which district were you born?". So, we construct the immigration and emigration rate using this information for four different age groups. For the immigration rate, we divide the total of immigrants in the districts by the population in the district. And for the emigration rate, we divide the number of people born in the district living outside among all people born there. The microdata is available upon request.

3.3 Other Data: Robustness Checks and Controls

To test for the robustness of the results on social unrest, we include different sets of data. The first are proxies of economic wellbeing for each period of analysis. For the Tupac Amaru rebellion, we rely on Guardado (2018), which measured economic wellbeing in 1754 using the price paid by *corregidores* to get the position. The benefits of purchasing the function included the possibility to tax indigenous people, so she argues that the most valuable were the ones with better economic conditions. We use data from 1981 and 2007 population censuses (microdata available upon request) to construct three modern proxies of economic wellbeing: the share of the population with electricity, the percentage with a dirt floor, and the average number of durable goods owned by the households of an area.

As an additional robustness check, we also use measures of weather shocks for each period of social unrest studied in the paper. The data for the first period comes from Morales et al.'s (2020) study on the droughts occurring in South America between the 1400s and 2000s.[22] We use data on precipitations from the Climatic Research Unit of East Anglia University for the other two periods.[23]

Finally, we construct proxies for the level of provision of the public goods using information for education and road infrastructure. We obtained the district's number of

[22] Data available at: http://drought.memphis.edu/SADA/
[23] Data available at: https://www.uea.ac.uk/web/groups-and-centres/climatic-research-unit/data

schools in 2019 from the Education Ministry's National Educational Census, the enrollment rate (for children and adolescents), the literacy rate, and the average years of schooling (for adults) collected in the National Population Census 2017. Similarly, we construct three measures of access to roads in the district using GIS official information on the road system in the country from the Transport and Communication Ministry.

3.4 Descriptive Statistics

Appendix 1 presents summary statistics and detailed definitions for all the variables in this section. Appendix Table A.1 presents descriptive statistics about them too. All data used for the paper analysis is available for replication.[24]

3.5 Qualitative Historical Evidence

In several parts of the paper, we will constantly refer to the abundant archival evidence gathered by two historians to complement our quantitative results. First, we have Stavig's (1999) book "*The World of Tupac Amaru: Conflict, Community, and Identity in Colonial Peru*," where the author revises the case of the provinces of Canas y Canchis and Quispicanchi, both tributaries of the Mita, from the start of the colony until the beginning of the Tupac Amaru rebellion. The book provides an in-depth analysis of how the people were heavily affected by this institution and how this relates to social unrest, the persistence of identity beliefs, and the strength of the community ties. Second, we have Jacobsen's (1993) book *Mirages of Transition. The Peruvian Altiplano, 1780-1930*, where he also takes an in-depth revision on a Mita-subjected province (Azangaro, in Puno) since the end of the Tupac Amaru rebellion and the start of the contemporary era. The author studies how the social hierarchies formed during the colonial period affected economic development during the period included in the study. In particular, he argues that the conflictive dichotomy between the landlord elites and the peasant communities was key for understanding how the area avoided a successful transition to a modern capitalized world.

Both studies rely on historical archival information from local courts, officials' correspondence, and administrative records. For both, it demanded years of work revising and summarizing their findings. Instead of using their evidence directly, we will rely on

[24] See: https://sites.google.com/view/huaroto-cesar/inicio.

the insights they got from their studies. Fortunately, the three provinces are part of our sample, making them especially relevant for our analyses.

4. Identification Strategy

4.1 Geographic Regression Discontinuity Design

We use the identification strategy proposed by Dell (2010), specifically a Geographic Regression Discontinuity Design (GRD). The first estimation equation is:

$$y_{db} = \propto + \gamma mita_d + X_{db}'\beta + f(geo_d) + \phi_b + \epsilon_{db}, \quad (1)$$

where y_{db} represents the outcome variable in district d along segment b of the boundary of Mita. $mita_d$ is a dummy indicating whether the region belonged to the Mita area during the colonial period. The matrix X_{db} contains a set of geographic control variables such as altitude, slope, average precipitation, temperature, and 1500s estimates of cropland area and the population at the district level. We also include boundary segments fixed effects ϕ_b.

The term (geo_d) controls the proximity to the border, similar to a traditional regression discontinuity design (RDD). Nevertheless, we will use only semi-parametric approximations due to the geographic boundary's multidimensional features and data size limitations. We follow the three measures of distance proposed by Dell (2010): polynomials of the latitude and longitude, distance to the Potosi mine, and the Mita boundary, but we only use the second-order polynomial version instead of the third-order one preferred by Dell (2010), following Gelman & Imbens's (2017) guidance of avoiding using higher-order polynomials in RD designs. Also, we test the robustness of our main results using linear and cubic polynomials.[25]

We also estimate equation (1) at the household level, using data from household surveys. In this case, we use clustered errors at the district level, and the estimating equation becomes:

$$y_{idb} = \propto + \gamma mita_d + X_{db}'\beta + \rho f(geo_d) + \phi_b + \epsilon_{idb}. \quad (2)$$

[25] These analyses can be found in Online Appendix 2, and the results remain qualitatively similar. We replicate Tables 2 to 7, which are named Tables A.2.2, to A.2.7, respectively.

The identification assumption of our GRDD is that the determinants of our outcome variables vary smoothly at the Mita border. Thus, Mita effects can be identified by estimating equations (1) or (2) and correspond to the coefficient γ.[26]

We also use the same sample in Dell (2010), which included all districts within 100 km of the Mita boundary in an area geographically comparable.[27] In Figure 2, we present the areas included in this sample. We observe that the Mita and non-Mita districts seem identical in geographic characteristics around the boundary. Although, this will be formally evaluated in the following sub-section.

FIGURE 2 HERE

4.2 Validation of the Identification Strategy

We present evidence of comparability around the border in geographic and demographic variables in Table 1. In the first five columns, we present results for different measures of geographic and climatic potential confounders (see the data section for details on the sources). As discussed in the methodology section, we assume that all differences between the treated and control group should be minimal along the border of the Mita. As can be seen, however, we find statistically significant differences for some variables on some specifications.

Specifically, Mita districts have marginally higher altitudes and gradient slopes and higher precipitation; these differences are small to be relevant to explain our results, given the size of the effects vis-à-vis the mean in the counterfactual areas. We observe almost no statistically significant differences in historical temperature and in estimates of the district's share of land crop area and the population density in 1500. However, the magnitude of the difference might be meaningful in some specifications. Thus, our estimations include all these variables as controls to avoid potential confounders bias and improve the model's fit.

TABLE 1 HERE

[26] As discussed in Keele and Titiniuk (2015), this is a limitation of the semi-parametric GRD approach with respect to the traditional RDD. Our running variable, distance to a border, is not completely continuous since districts' capitals are never exactly at a border.

[27] Like Dell (2010), we also exclude ten districts that include Cusco City (the only large city around the Mita area).

5. Persistent effects on Social Unrest

5.1 Main Results

In Table 2, we present our estimates of equation (1) for four measures of the support for the Tupac Amaru II rebellion. The first two columns show the effect on the probability that the district was the origin of at least a rebel leader documented in O'Phelan (2012) for districts at 100 km and 50 km of the Mita border, respectively. As can be seen, the estimates imply positive treatment effects, with more significant values in Panels B and C, which use the quadratic polynomial to the distance to Potosi and the Mita boundary, respectively. Results are not statistically significant in Panel A, but the sign and magnitude of the coefficient are consistent with a positive effect. Notably, just between 6 and 8 percent of the districts in the control group were the origin of a rebellion leader.

Columns 3 to 8 present three measures constructed from the previous work of Morner and Trelles (1986), for which we only have data for the Cuzco region (around 42% of the entire sample around 50 km of the Mita border). Columns 3 and 4 present the effect on the percentage of districts with evidence of support from the *cacique* (local indigenous leader) or the community based on the letters sent by the rebels and loyalists. We estimate a Mita treatment effect of between 26 to 43 pp. In contrast, the average percentage in the control groups was only around 3 to 5 pp, indicating a remarkable significant difference between the Mita and the control groups. Results were not statistically significant only for the specification in Panel B, but the signs and sizes of the coefficients are consistent with the other results. Columns 5 and 6 present the opposite: the effect of the Mita on the probability that the *cacique* or the community decided to fight against the rebellion. Although results are not statistically significant, we find a negative sign in all the specifications.

We combine information from support and opposition to the rebellion in an index with values from -2 when both the *cacique* and community opposed the rebellion to +2 in the opposite case. Intermediate values indicate if there is information indicating that only one of these groups is acting in the uprising. The index takes a value of 0 if there is no data on support in the district for any side or if both groups canceled each other. We see that, on average, the index is around 1.1 points larger in Mita districts for specifications in Panel C. Still, sign and magnitude are consistent in the other specifications. On average, the control group had an index of -0.2 to -0.3, indicating they were in average against the rebellion.

TABLE 2 HERE

In Table 3, we present the estimates of the Mita effect for proxies of social unrest for two modern periods: The internal conflict (1980-1993) and the period of anti-mining protests (2004-2017). For the first, we use a dummy that takes a value of 1 if there was at least one violent event within the district for the whole period. For the second, we use a dummy that indicates whether at least an anti-mining protest occurred in the district during the second period.

Mita districts are between 11 to 46 pp more likely to have at least a violent event in the district during the Internal Conflict. While also having approximately 17 to 23 pp higher probability of having at least one anti-mining protest in the district. Results are robust in all specifications, and it is notable that in both cases, and similarly to what we saw in Table 3, they represent a significant increase concerning the average for the control group. In the case of the internal conflict, the Mita areas duplicate the probability of a violent conflict. At the same time, the effect is even more significant for the later period since only between 3 and 4 percent of the control group experienced one of these protests.

TABLE 3 HERE

Figure 3 presents the results from a spatial perspective. Notably, we can see that it is not the case that a particular area is driving the higher levels of social unrest within the Mita catchment area. Also, we see a sharp difference in the three outcomes along the border. In addition, it is worth noting that it is not the case that Mita districts are, in general, more violent or more prone to any type of conflict: In Appendix Table A.1.2 we show that the Mita districts have, on average, *lower* criminalization rates, which is consistent with a higher social cohesion within the community. Indicating that social conflict is not generalized, but rather focused on the state or against outsiders to the community.

FIGURE 3 HERE}

5.2 Historical Qualitative Evidence

A limitation of the quantitative evidence presented so far is the 200 years gap between the first (the Tupac Amaru rebellion) and the second (the Internal Conflict) periods of conflict. Unfortunately, we do not have data for this 200 years gap.[28]

Instead, we will rely on Stavig's (1999) and Jacobsen's (1993) work to complement our results. In particular, Stavig (1999) claimed that one reason behind the start of the Tupac Amaru rebellion was that the "social pact" that the indigenous communities believed existed between the Crown and them was systematically being eroded.

In particular, Stavig (1999) argues that the context of the Mining Mita in the Andean society made locals believe that even when difficult to fulfill, the Mita was a pact to allow them to maintain their lands and, in general, their ways of living.[29] Also, social cohesion was critical since the Mita was a community-level imposition. When assigned to the Mita, they had to leave their homes, properties, and children, hoping the community members would care for them.[30] At the same time, not fulfilling the duty of the Mita system was considered a heavy offense by the community since it could create reprisals against them, so the community was very interested in the enforcement of this institution, which they considered a way of guaranteeing their rights over land.[31]

Thus, there was not much protest or conflict during the sixteen and seventeen centuries in the colony, but it grew as the land became scarce in years close to the eighteenth century.[32] Then, the unrest began to emerge since access to land was essential for indigenous communities given that it was the primary source of income and critical for

[28] Although there is some evidence of rebellions before the Tupac Amaru rebellion, they were very small and located far from our area of study (O'Phelan, 2012).

[29] "In the colonial period Mita's work was also viewed by the indigenous people of upper Vilcanota and other places as vital, though increasingly onerous, part of the pact of reciprocity they believed existed between themselves and the crown and which guaranteed their rights to land" (Stavig, 1999, pp. 20).

[30] "In addition to the harsh work in Potosi, mitayos faced other problems. Who would take care of their children, fields, and animals? Would fellow villagers act in good faith and protect their interests? The relative infrequency of complaints by returning mitayos suggests that their interests were, for the most part, well protected furing their long service in Potosi" (Stavig, 1999, pp. 194).

[31] "Despite efforts to ensure that the mita rotation was completed, mitayos sometimes fled Potosi and returned home. Such action may be viewed as a form of resistance, but the premeature return of mitayos, especially when not justified by community standards, put the curaca and community in a difficult position" (Stavig, 1999, pp. 203).

[32] "As the indigenous peoples of Canas y Canchis and Quispicanchis approached the eighteen century a heritage and structure of ethnic land conflict was already in place. During that century disputes not only continued but were exacerbated, and land, fundamental to Andean peasant existence, was at the center of much of the conflict." (Stavig, 1999, pp. 114-115).

their culture.[33] Moreover, the political and economic changes of the mid of the eighteenth century (the so-called, Bourbonic reforms) were the ones that created a conjuncture that ended with the rebellion of Tupac Amaru. [34]

Interestingly, Jacobsen's (1993) main conclusions are also aligned with the main insights of Stavig (1999). In particular, he claims that the Azangaro province could not take advantage of the economic boom of the wool because the lack of individual property rights and the persistence of ethnic cleavages between landlords and indigenous did not allow the region to use this opportunity to transition to a capitalist economy.[35]

Also, Jacobsen (1993) mentions at least two significant violent indigenous rebellions in the area after the Tupac Amaru II rebellion. The first occurred during the 1866-68 period, during the tumultuous first decades of the Republic. It was led by Juan Bustamante, a Peruvian *indigenist*[36] intellectual of the region. Notably, he took the pseudonym of Tupac Amaru III and claimed to be a descendant of the Incas with the mission to restore their

[33] "The crops and animals produced on the land provided the food and the means of trade that sustained life. From the earth also came the wherewithal to meet tribute demands and other obligations imposed by the colonial state. By complying with the state and the community obligations, *originarios* secured their right to the community lands. This, in turn, helped guarantee the social reproduction of the family and the community, thus access to land was not only important in assuring the perpetuation of life but the perpetuation of a way of life" (Stavig, 1999, pp. 115).

[34] "In the quarter century or so preceding 1780 new demands were added to the older burdens. The communities of Quispicanchis and Canas y Canchis were hard hit by imperial policies. Tax collection was made more efficient, and the *reparto* was legalized. The situation was further complicated with the division of the viceroyalty of Peru and the creation of the new viceroyalty of Rio de la Plata, which disrupted trading patterns and economic life in southern Andes. Tensions also increased when the *alcabala*, or sales tax, was raised and a number of items *naturales* produced became subject to the tax for the first time. These changes, added to traditional demands such as the Potosi mita and tribute and made more acute by demographic resurgence, weakened the social glue that secured the relationship of the *naturales* to colonial society." "None of the economic factors was significant enough on its own to incite rebellion, but formed a conjuncture they created the basis of a growing crisis that affected the colonial economy and indigenous communities" (Stavig, 1999, pp. 211-212).

[35]"This book explores the cycles and long-term transformations of a provincial agrarian economy and society in the Andean highlands of Peru during the century and a half from the crisis of the colonial order to the crisis of the export economy. The broadest conclusion is that the persistent legacy of colonialism was the crucial factor in blocking the transition to capitalism the Peruvian altiplano".

"What, then, is meant by 'legacy of colonialism'? It means the tendency of most social groups in the altiplano – Indian community peasants, hispanized large landholders, traders, priests, government officials, police, and military- to use polarized visions of society, such as those of colonizers/colonized, Spaniards/Indians, civilized notables/barbaric peasants, to construct, define, and fortify their own power and social identity" (Jacobsen, 1993, pp. 3).

"In short, the process of change in the Peruvian altiplano was driven by the same forces that propelled the transition to capitalism elsewhere. Yet, the forces provoked a reawakening and readjustment of an older set of social forces that constituted a serious obstacle to the emergence of capitalism: monopoly, clientelism, and communal solidarity. Pressure from the market and the redefinition of the labor process and o legal norms were not strong enough to defeat those older social forces. (Jacobsen, 1993, pp. 5).

[36] Indigenism was an intellectual and cultural movement that emerged in many Latin American countries and aimed to revalorize ancient indigenous culture.

empire. The second was the Rumi Maqui ("hand of stone," in Quechua) rebellion in 1915, led by Teodomiro Gutierrez, who claimed that he would restore the Tahuantinsuyo and restore the power of the indigenous communities. This second rebellion was followed by other uprisings, which ended in 1923.

Based on the work of these two authors, we could argue that our results on social unrest truly capture persistence. They also supported our working hypothesis on the cultural roots of social unrest.

6. Is there evidence of a Cultural Divergence?

In this section, we present evidence for our central hypothesis: The Mita created a cultural divergence, which is the cause of the persistence of social unrest. First, we offer a simple theoretical rationale for this hypothesis following Acemoglu and Robinson (2021). Second, we will present quantitative evidence in modern outcomes related to culture. Third, we will complement our results with the insights from Stavig's (1999) and Jacobsen's (1993) works, which are based on impressive qualitative archival data.

6.1 Conceptual Framework

Acemoglu and Robinson (2021) present a framework to understand how institutions and cultures determine each other. They define culture as: "*historically transmitted patterns of beliefs, relationships, rituals, attitudes and obligations that furnish meaning to human interactions and provide a framework for interpreting the world, coordinating expectations and enabling or constraining behaviors*." They argue that culture must be understood as a cultural set composed of cultural attributes and possible connections between them. With these attributes and relationships, they can wire *cultural configurations*. The *cultural set* is historically persistent, but it does not determine social equilibria but can be used by individuals to adapt to different environments and create new *configurations* when needed. Therefore, according to this framework, the *culture set* is historically persistent and could be maintained over generations. Still, it can be used strategically to justify actions and decisions by creating different *configurations*, just like institutions, which can also be adapted.

Finally, a critical question is how *configurations* are established. The authors argue that the prevailing *configuration* is determined by the *cultural attributes* of the *culture set*, history (i.e., past *configurations*), institutions, and politics. Notably, they remark on institutional arrangements that shape and regulate economic and political power in the latter. In specific, they refer to the ability of certain groups of individuals to form coalitions, develop new ideas and innovations, and exercise control over other groups.

In our setting, we consider that Mita and non-Mita areas were culturally identical before the installation of this institution. We see the Mita as a disruptive event that created a cultural divergence of the same order of magnitude as a large epidemic or a natural cataclysm. As discussed before, the Mita was an onerous extractive institution that was strong enough to be considered by subjected individuals as the most harmful consequence of the Spanish *Conquista* (Stavig, 1999). There is ample evidence that the Mita itself profoundly impacted the affected population at every level (individual, familiar and communal) while also modifying the rest of the community's relations with the rest of the colonial world.

We argue that the Mita districts had and currently ended up with *different cultural configurations*. In addition, the local indigenous population had a relatively *hardwired culture*, which helps to explain the persistence of this cultural divergence over time.[37] We argue that this deviation has the potential to explain differences in beliefs, identity, and social unrest.

6.2 Results on Identity Beliefs

First, we present estimates for the effects of the Mita system on people's opinions regarding ethnic self-identification in Table 4. In columns 1 to 3, we show the Mita effect on the percentage of the population that learned Quechua or Aymara as their mother tongue in 1961, 1981, and 2017, obtained from the population censuses of those years. We observe that the effect is positive and statistically significant for two polynomial specifications. The result is meaningful in size, in particular in 2017. Interestingly, there is a considerable decrease in the average for the control group between 1981 to 2017, going from 80 to 60 percent. This pattern is shared with the rest of the country, where we also observe that the percentage of the population speaking a native language has decreased significantly over time due to the country's higher integration and increased

[37] The authors also discuss the concept of culture's fluidity. In more fluid cultures, it's easier for individuals to create and modify their configurations and attributes to adapt to any new situation. In contrast, hardwired cultures make it harder for individuals to adapt to changing environments.

educational opportunities for children. Then, the increase in the effect size estimated in 2017 means that this percentage has remained relatively stable in the Mita area, contrary to the control group.

We further explore this using another question from the National Population Census of 2017: "due to your customs and ancestors, do you feel or consider? i) Indigenous, ii) *Mestizo*, iii) White, or iv) Others." which aims to capture ethnic affiliation. In columns 4 to 7, we present the share of the population in the district that identifies the most with the four groups. As can be seen, the first group captures most of the people in the control group, around 75% on average, but this percentage increases by between 10 to 13 pp in the Mita districts. Simultaneously, we observe a mirror decrease in the portion that self-identifies as *mestizo*, the second ethnic group in importance.

TABLE 4 HERE

These results are striking since the differences between these two groups are not identifiable in appearance in contrast to what happened during colonial times. So, this self-identification probably captures a feeling of more affinity towards one of these groups. Interestingly, this could also be validated with historical evidence on racial distinctions made in the censuses of 1876 and 1940. In those censuses, the enumerator was asked to classify individuals' races, a typical practice in the countries in the region during those years. That practice was discontinued in the following censuses and was only included again in 2017, but as we saw before, now it's self-reported. In Appendix Table A.1.3, we can observe no statistical differences in both censuses, indicating that, to an external observer, they look equally in appearance. These results prove that the differences found in Table 4 between Mita and non-Mita areas are probably due to cultural differences, and not to racial ones.

6.3 Importance of Local Indigenous Institutions

In Table 5, we complement our previous results by exploring the presence of peasant communities. These communities are present all along the Andean region, but there is noticeable heterogeneity in their relevance. Their origins are diverse and can be traced down even to pre-Incan times. Most of their importance is related to the communal use of lands and the social support for common agricultural tasks.

In columns 1 to 3, we use a question where individuals have to select which social group they feel more identification. Here we find that people are more likely to select "Peasant Community" (PC) in Mita districts and are less likely to choose the "region, province, or district" (RPD) of residence in these same areas. Notably, the respondent can only select one answer, enabling us to identify their most relevant identification. Specifically, 53% and 30% of the control group felt more identification with the RPD and the PC, respectively. Identification with RPD in the treated areas decreases between 17 and 22 p.p. It simultaneously increases identification with PCs.

In columns 4 to 8, we present additional information to complement the previous result. In column 4, we see that more land in these districts is controlled by PC, based on the 2012 agricultural land census. While around 44% of the control group's land is in these communities' hands, treated areas have approximately 14 to 16 pp more. From the DINP database, we obtain the average number of PC in the district, the share of the district population affiliated with a PC, the percentage of these that the State formally recognizes, and the ones that own property rights of their lands.

We find around one more PC in the average treated district, meaning an increase of around 25% with respect to the control group. Similarly, we see a treatment effect of about 15 pp of the population affiliated with a PC, indicating a remarkable increase compared to the control group, which has an average of only 5%. Finally, around 13 to 18 pp more are recognized by the State or have property titles on their lands, indicating their formality is also higher. These results remark the significant importance of these PC in Mita districts, which is in line with the results on indigenous self-identification.

TABLE 5 HERE

6.4 Historical Qualitative Evidence

These quantitative results are consistent with Stavig's (1999) findings on the importance of ethnic identity in the Mita provinces before the Tupac Amaru Rebellion. Stavig (1999) mentioned that the colonial experience in the two provinces he studied permanently shaped indigenous identity in these areas. In particular, it made the local ethnicity and affiliation to their indigenous community (which will later be called the peasant community) much more salient than any other group.[38] The importance of peasant communities was critical since this is an institutional form that allowed them to protect their communal lands and also helped them preserve their culture.[39] He later mentions that these stronger ties to the community helped them join the Tupac Amaru rebellion.[40]

These insights align with Acemoglu & Robinson's (2021) concept of the adaptability of *culture configurations* to varying environments. In that perspective, due to the existence of the Mita, which threatens the persistence of the community, it is logical that institutions that help preserve community cohesion gain more relevance. Therefore, even when the Mita system is gone, the affiliation to the peasant communities persists and identifies with the indigenous ethnicity.

Importantly, as Jacobsen (1993) mentions, identification with peasant communities and the indigenous ethnicity affected how they connected with other groups, such as landlords, creating a tense and conflictive relationship. This opposition blocked the opportunity brought by the wool boom that affected the region during the 1910s and 1920s. According to Jacobsen (1993), the pressures of the external wool market and the national government's efforts to increase individual property rights over land failed to change the profound cultural dichotomy between indigenous and the landlord elites.[41] He calls this *neo-colonialism*, which he defines as the persistence of the cultural opposition of indigenous people to landlords, which they identify as the heirs of the colonial rule.[42]

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[38] "By the eighteenth-century colonial pressures and changes in the indigenous world had led to the 'ethnic' identities in Quispicanchis and Canas y Canchis that were at least as complex as they had been prior to the European encounter, this despite a plummeting population. And this identity was expressed most clearly not at a regional or broad ethnic level, but at the level of the community, moiety, and ayllu that became, in effect, 'ethnicities' (Stavig, 1999, pp. 6).

[39] See: "For the communities, there was nothing more vital than the land that guaranteed their social and biological reproduction. Attachment to communal lands provided a sense of identity" (Stavig, 1999, pp. 87). And "In Canas y Canchis and Quispicanchis indigenous traditions, though altered, still functioned to preserve strong communal identity" (Stavig, 1999, pp. 209).

[40] "Cultural tradition, communal solidarity, and hope for a more just order under an Inca led naturales to follow their curacas in joining the rebellion" (Stavig, 1999, pp. 255).

[41] "Although geographically and socially removed from Spanish colonial centers, rural society in provinces such as Azangaro was characterized most dramatically by colonialism. A handful of direct representatives of the colonial State and a few Spanish or culturally hispanized landholders, miners, and traders here clashed and -at the same time- lived together with an overwhelming majority of indigenous peasants, who adjusted as little as necessary in order to save what they could of their ethnic identity. The dual function of any colonial regime – to control the conquered population politically and socially to exploit it economically-left an indelible imprint on the structure of Azangaro's rural society. (Jacobsen, 1993, pp. 79).

[42] "But the fundamental problem was the very nature of the altiplano's hierarchical and segmented neocolonial society. By neo colonialism I am not referring primarily to any dependence that might have continued to tie the altiplano to an overseas metropolis. Rather, I am referring to the revitalized strength of a colonial mindset polarizing society into Indians and Spaniards or whites. Neocolonialism facilitated the cycle between the 1860s and 1920 in which hispanized landholders came to control an increasing share of

This opposition between indigenous and elite landlords is what the author identifies as the root of social unrest.

6.4 Other consequences: Cultural Isolation and Beliefs about Development and Democracy

In addition to its effects on identity, the cultural impact of Mita can be found in other aspects of the daily lives of people in the affected districts. For instance, due to the higher attachment to their local communities, they are more likely to be socially isolated from the rest of the country. We provide evidence of this by showing how migration patterns differ between Mita and non-Mita districts using the population census of 2017. As shown in Table 6, we see lower immigration and emigration rates, which are about 4 to 7 pp lower in treated districts. Both differences are meaningful in size. It's possible to see that same pattern and magnitude of coefficients when the sample is divided into four age groups: i) less than 18, ii) between 18 and 39, iii) between 40 and 64, and iv) 65 or older, so it is plausible to affirm that it is a persistent effect until, at least, the present population.

TABLE 6 HERE

In addition, we study perceptions about democracy, discrimination, trust in institutions, and subjective wellbeing using the National Survey of Households of Peru (ENAHO), which includes a special module answered by an adult (randomly selected from the household) on opinions on these dimensions. This feature is critical for our study. Given the survey's large sample size, we have information for several geographic areas (while, in contrast, other opinion surveys, such as Latinobarometer or LAPOP, consider only large cities).

Table 7 presents impact estimates using the responses to a question included in the ENAHO 2006 survey where subjects are asked their opinion regarding the importance of five variables in explaining economic development: i) colonial history, ii) foreign intervention, iii) bad government, iv) people's attitudes, and v) scarcity of natural

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altiplano resources, but it also constituted the basis of Indian peasant resistance against that expanded control. The practices of paternalism, coercion, and violence, through which the hispanized provincial elite defined the community peasants and colonos as Indian and subordinate, reinforced the Indians' own perception of their identity as distinct and taught them the continued usefulness of communal solidarity and of maintaining their peasant livelihoods. (Jacobsen, 1993, pp. 330).

resources. Answers are from 1 (low importance) to 4 (very important), although "I don't know" (IDK) was also an option.[43]

Columns 1 and 2 present the Mita effects on the share of people who choose IDK for any option. We see that 15 and 39 pp. of the control group chose IDK for all the options and at least one, respectively. People in Mita districts are likelier to choose IDK, specifically, around 21 to 24 pp for all possibilities and 16 to 20 pp in at least one, respectively.[44] We will discuss the higher probability of selecting IDK options in detail below, but our interpretation is that this is caused by lower political engagement in the Mita areas.

Columns 3 to 7 present the Mita effects on the share of people who select each option when answering the question (we use a dummy that takes a value of 1 if people respond the options "important" or "very important" to the questions), and there we find that most of the estimated coefficients are positive. Still, we only find statistically significant results for the first option: colonial history. While individuals in the control areas select this alternative in 48 pp of the cases, people in Mita areas do so with a higher probability (between 10 to 29 pp more, depending on the specification). We consider it noteworthy that people affected by a colonial force-labor institution choosing this option as a reason for current (under)development is quite relevant to the literature on the long-term effects of history. As far as we know, this is the first type of direct self-reported evidence that has been used in this literature.

TABLE 7 HERE

In Table 8, we move to study Mita's effects on beliefs about democracy. People were asked whether they knew the meaning of "democracy." As can be seen, people in treated districts are much less likely to answer affirmatively to this simple question. The estimates show a decrease of between 12 and 19pp., versus an average of 31% for the control group. Next are the answers about what people believe are the effects or consequences of democracy, in columns 2 to 5 (for those who answer yes to the question presented in column 1). We find that people in Mita areas are less likely to select the three alternatives that imply a positive effect of democracy on their wellbeing (i.e., respect

[43] Unfortunately, 2006 was the last year when this question was included in this module, so we cannot include a more up-to-date version of the survey.
[44] In Appendix Table A.1.4, we present the share of people who chose IDK for each option; as seen, it affects all of the options.

people's rights, improve my family's wellbeing, and being represented). But there are no differences in the one that could be considered the more mechanical effect of democracy (i.e., electing authorities.) In column 7, we see that, on average, they also select options.

TABLE 8 HERE

Thus, the evidence suggests that people in Mita districts have attitudes and beliefs that imply lower political engagement and commitment to a democratic system. Additionally, people living in Mita districts are more likely to choose the IDK option whenever it is available in the questions about beliefs: trust in institutions, perceptions about corruption, discrimination, etc., which could be interpreted as a generalized distrust of or unease about the political, social, and economic system. These results are available upon request.[45]

7. Alternative explanations

Despite the evidence shown in previous sections, there is the possibility that alternative explanations may explain some of the previous results. In this section, we revise some of them. First, we study whether the results we find can be explained by income effects caused by the Mita system. It is plausible that an impoverishing effect is behind differences in beliefs/migration and social unrest. Second, Dell (2010) suggests that the Mita system hampered the creation of land elites (known as *hacendados*) who, after the abolition of the institution, used their political power to bring public goods to the communities close to their estates (*haciendas*). Then it is the lack of these public goods in Mita areas that may drive our results.

Naturally, the same can be said in the opposite direction. For instance, the long-term economic underdevelopment, the lack of land elites, and the absence of public goods can be attributed to the original cultural divergence proposed in this paper. There is no direct way to test which of them is the most important, and it is always possible that a combination of them occurred in practice.

[45] A potential concern to our previous point is that the impoverishing effects of the Mita system also caused people to be less educated, to have less information, or to have more time constraints, which would cause a higher share of "IDK" choices. In Appendix 1, Table A.1.5, we provide evidence that this is not the case. Using questions from the rest of the survey, we find that for non-politically related questions, there is no difference in the share who selects "IDK" in Mita and non-Mita areas. If anything, people in Mita districts are less likely to answer IDK to other types of questions.

We will use three robustness tests to address these two concerns. The first is to replicate the results presented in Table 2, including as controls proxies for wellbeing in years before the social unrest event occurred. If the Mita harmed income and that effect drives our results, including it as a control will attenuate our results. We called this the robustness test to “bad” controls. We consider this robustness test to be conservative, indicating that even if the coefficient attenuates, it is still plausible that our estimates are valid. Still, if our results hold, it would be a strong indicator that the income mechanism was not the main impact channel (albeit one of considerable importance).

For the Tupac Amaru rebellion of 1780, we include the log of the *reparto* per indigenous person in 1754. The *reparto* was a tax that *corregidores* (local governors assigned by the colonial State) were allowed to extract from the indigenous living under their authority. Since it was known by the State that not all communities were equal in terms of wealth and development, the amount was fixed based on the available information from the officials in 1754, when the *reparto* took place. We construct this measure from Guardado's (2018) replication materials. A limitation is that it is only available at the province level. For the modern periods, we use three proxies of wellbeing at the district level: i) % of households with access to electricity, ii) % of households with a dirty, and iii) the average number of durable goods per household, obtained from the population censuses of 1981 and 2007. As presented in Table 9, the coefficients shown in Table 2 are almost unaltered by including the proxies of economic wellbeing, indicating that the social unrest phenomenon is unrelated to these variables.

TABLE 9 HERE

The second robustness test is similar but uses an exogenous shock instead of bad controls. We construct a proxy for income shocks using a variable indicating the number of years with droughts in the years before the three social unrest periods for every district in the sample (see Data section for details on the sources). The idea is that using an exogenous shock on income, such as droughts, we could estimate the main effect of income on social unrest through this variable, which under our identification assumptions should be orthogonal to the presence of the Mita system. So if we see that the coefficient of the Mita is not different from 0 (or at least attenuates in a significant way), we could be in the scenario where our hypothesis of a cultural mechanism does not hold. As seen in Table 10, the coefficients of the impact of the Mita do not vary when we include these weather shocks, indicating that the effect of the Mita on social unrest does not seem to be mediated through an income channel.

TABLE 10 HERE

Finally, we update the study of the public goods hypothesis Dell (2010) suggested. She provided evidence of differences in the provision of these public goods for different moments in the nineteenth and twentieth centuries, so it's impossible to discard that they, indeed, had a role in explaining social unrest. In turn, it's also plausible that the lower provision of public goods resulted from higher social unrest and cultural isolation in the Mita areas. We come up with a different approach to shed light on this puzzle. In this case, we will use the most updated education and road infrastructure services provision.

As seen in Table 11, we do not find differences in the log of schools in the district in the year 2019, the enrollment rate in 2017 (primary and secondary level), the probability of having a paved road, and the road density in 2019. We find some differences in the literacy rate for adults and the average number of years of schooling, which we consider too marginal to drive our results. Our interpretation is it is unlikely that the direct provision of public goods still has a significant impact on explaining current levels of social unrest, given the minor differences we observe in the present. If a past difference in public goods explains recent outcomes, it is probably related to a cultural channel like the one emphasized by our hypothesis.

TABLE 11 HERE

8. Concluding Remarks

The study of social unrest face the challenge of disentangling the underlying economic, cultural, and social causes behind it. Our paper revisits the case of the mining Mita system, a colonial institution in Peru, where Dell (2010) found long-term effects on economic development. Following Dell (2010), we implement econometric estimates from a geographic discontinuity design related to the Mita catchment area and identify the causal effect on social unrest at different times. We then argue that the primary mechanism behind this effect is a cultural divergence caused by the Mita and that this cultural divide has persisted until now.

We use three periods of time to document the effects of the Mita system on social unrest: (i) the late XVIII century, when the “Great Rebellion” of Tupac Amaru II took place, (ii) the 1980s and 1990s, the period of internal conflict between the communist guerrilla of “Shining Path” and the Peruvian government, and (iii) The 2000s and 2010s when Peru underwent a significant mining boom but was heavily contested by local population anti-mining protests. We find significant and economically meaningful differences between Mita and non-Mita districts for all three periods, with Mita areas remarkably more affected by social unrest. We complement our econometric results with anecdotal evidence from historical studies on other social unrest events. From these studies, we also gain insights that are aligned with our hypothesis.

We then test this hypothesis using data on beliefs, identity, and migration. We find consistent evidence supporting this idea. In particular, we find that people in Mita areas have less knowledge about democracy, feel less identified with the country vis-à-vis their peasant community, and are more likely to select the “colonial past” as a fundamental cause for economic (under)development. Jointly with the evidence on social conflict, these facts are consistent with the hypothesis of the importance of beliefs as a cultural mechanism of persistence of history. We also tested alternative explanations to our results and show that our main conclusions hold after several robustness exercises.

To conclude, we believe this study's findings contribute to our understanding of the persistent effects of colonial extractive institutions on social unrest and the persistence of cultural traits and social unrest caused by these events. Our results suggest that specific historical institutional differences, like those related to the mining Mita in colonial Peru, start processes that lead to significant and permanent effects on social unrest and cultural dimensions as a persistence mechanism. Although the evidence on the interrelation of culture and institutions in determining economic development is now well-established in the literature,[46] we hope to help to understand better the interplay of institutions, economic shocks, social unrest, and beliefs.

[46] For instance, see: Acemoglu & Robinson (2021); Acemoglu & Wolitzky (2014); Alesina & Giuliano (2015); Giuliano & Nunn (2021).

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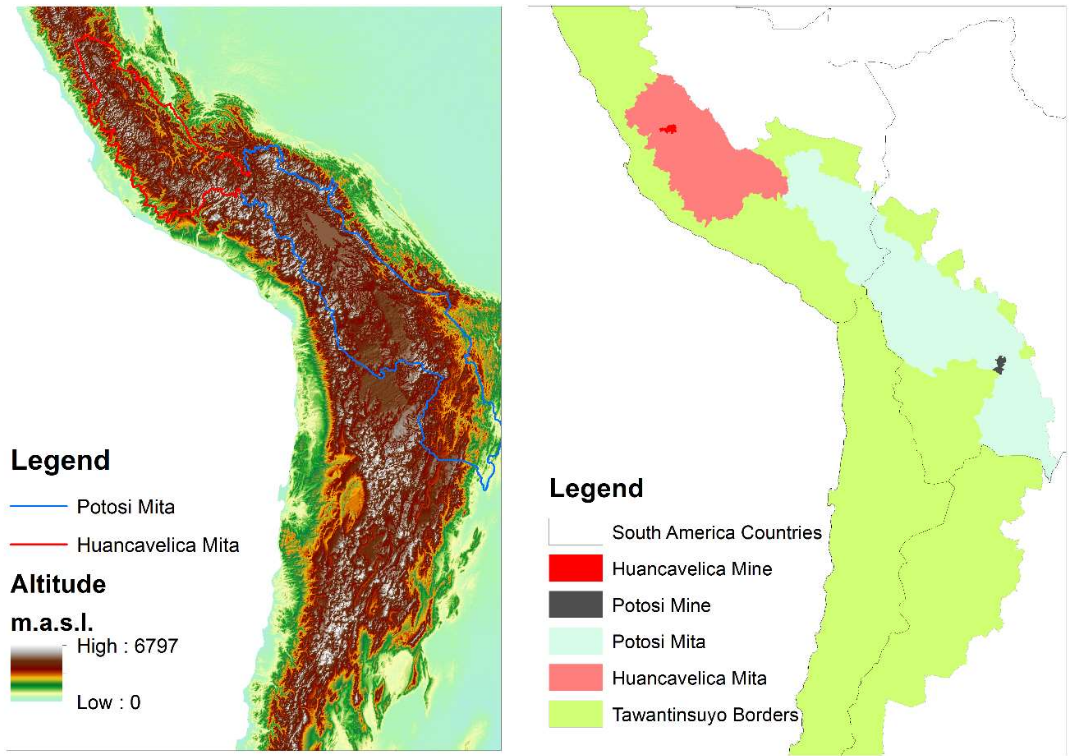
Figures

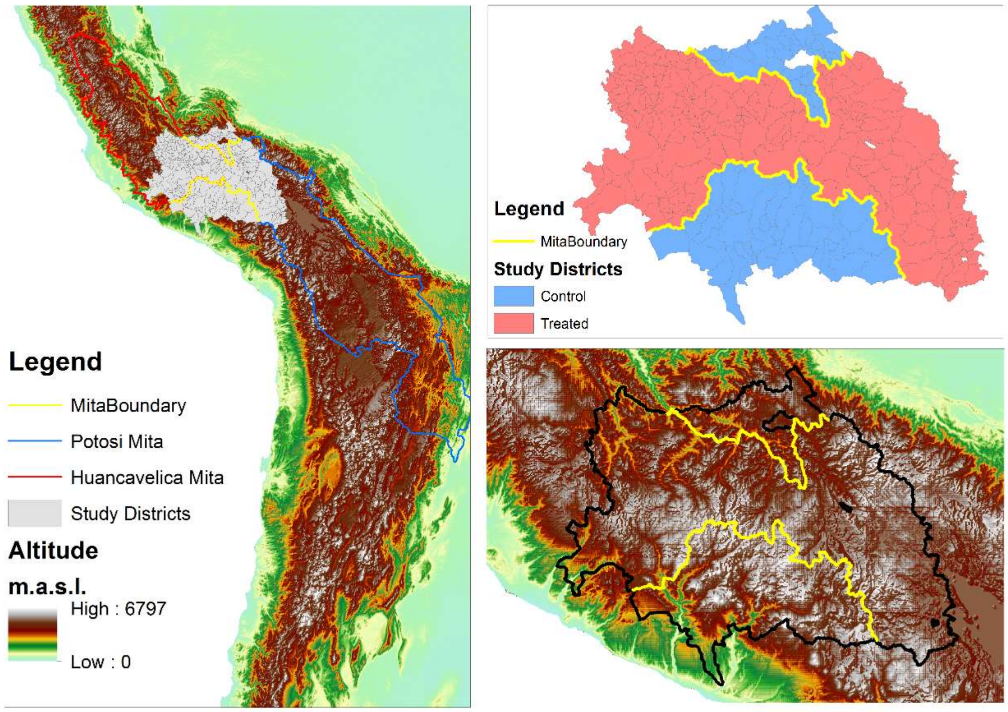
Figure 1. The Mining Mita

Panel A. Topography around the Mita *Panel B. Areas Assigned to the Mita*



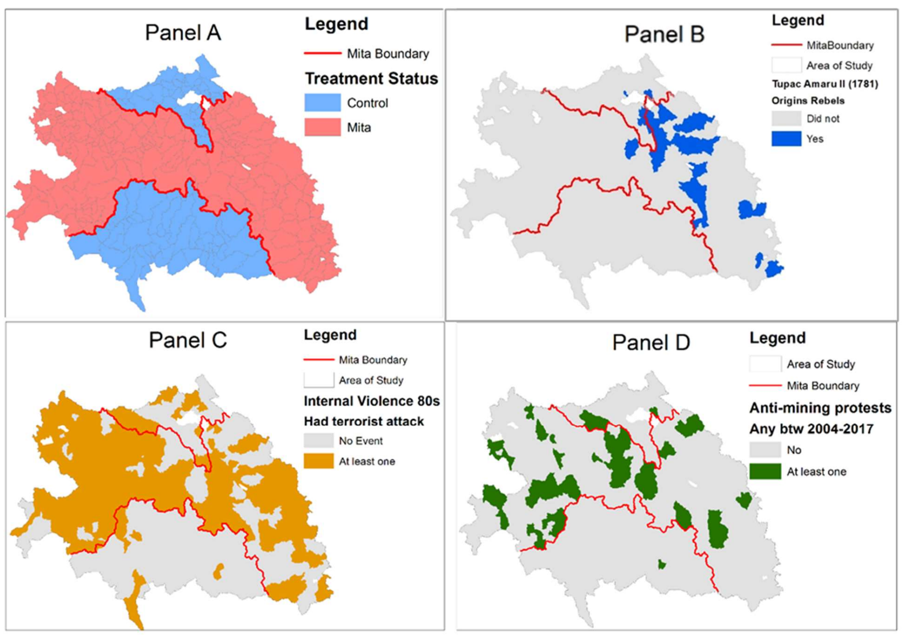
Note: Data for the borders of the Mita area and altitude at pixel level are from the Data Appendix of Dell (2010). The Huancavelica and Potosi mines are the current municipalities where mines were located. The borders of Tawantinsuyo are constructed by ourselves using the current boundaries of provinces included in the 1573 census of Viceroy Toledo.

Figure 2. Study Area



Note: See notes in Figure 1 for the border of the Potosi and Huancavelica Mita. In the left figure, we plot the 289 districts used in this study in grey. In the upper-right, we present the same districts distinguishing between treated (within Mita borders) and control (outside). In the bottom-right, we present in black the boundary of our study area and in yellow the Mita boundaries within our area of study.

Figure 3. Differences in Social Unrest in Mita and Non-mita Districts



Note: All panels present the 289 districts in the study sample. Panel A shows in pink the treated and light-blue the control groups. Panel B, C, and D present in blue, dark-yellow, and green the districts with at least one event of a conflict. The variables are the same as the ones used in Table 2. In panel B, the dummy takes a value of 1 if the district supported the Tupac Amaru Rebellion. In Panel C, the dummy takes the value of one if there was at least one violent event during the 1980-2000 internal conflict. In panel D, the dummy takes a value of 1 if at least one anti-mining conflict occurred between 2004 and 2017. See section 3 for more details on data construction.

Table 1. Effect of Mita on Geographical and Demographic controls

	Dependent: Geographical and Demographic controls					
	Eleva-tion	Slope gradient	Precipi-tation	Air Tempe-rature	Population Density 1500 AD.	Share of cropland 1500 AD.
	(1)	(2)	(3)	(4)	(7)	(8)
	Panel A. Quadratic polynomial in latitude and longitude					
Mita	-0.04 (0.08)	-0.83 (0.61)	1.82*** (0.4)	0.49 (0.7)	-0.99 (2.26)	-0.25 (2.76)
N	289	289	289	289	289	289
R2_ajust	0.44	0.44	0.28	0.40	0.15	0.26
	Panel B. Quadratic Polynomial in Distance to Potosí					
Mita	0.21*** (0.06)	-2.3*** (0.41)	1.38*** (0.28)	-1.18** (0.48)	2.92* (1.49)	3.02 (1.84)
N	289	289	289	289	289	289
R2_ajust	0.34	0.42	0.20	0.36	0.14	0.25
	Panel C. Quadratic Polynomial in Distance to Mita Boundary					
Mita	0.13** (0.05)	-2.2*** (0.4)	1.38*** (0.27)	-0.36 (0.48)	2.18 (1.43)	5.45*** (1.84)
N	289	289	289	289	289	289
R2_ajust	0.33	0.39	0.20	0.28	0.12	0.17
Mean of outcome for non-Mita Districts	3.84	9.24	5.86	7.51	7.02	1.09

The Table reports OLS estimates. Observations are at the district level. Robust Standard errors in parentheses. All regressions include boundary segment fixed effects. Coefficients that are significantly different from zero denoted by: *** $p< 0.01$, ** $p<0.05$, *$p<0.1$. Dependent variables are elevation in meters above sea level. The slope gradient is the average slope in the district. The historical mean precipitation is in millimeters (mm), and the historical air temperature is measured in C° degrees. Population density is the population divided by the area of the district in 1500 AD. The share of cropland is the cropland area in the district divided by the area of the district in 1500 AD.

Table 2. Effect of Mita on support to the Tupac Amaru II Rebelion (1780 - 1783)

	Origins Rebels		**Rebels Side**		**Loyal Side**		**Support Intensity**	
Dependent:	Prob. of being a place of origin of rebels		Prob. of supporting the rebellion		Prob. of going against the rebellion		Level of support for the rebellion	
	< 100 km (1)	< 50 km (2)	< 100 km (3)	< 50 km (4)	< 100 km (5)	< 50 km (6)	< 100 km (7)	< 50 km (8)
	Panel A. Quadratic polynomial in latitude and longitude							
Mita	7.79	1.79	35.81*	31.39	-7.41	-4.77	0.94	0.86
	(6.77)	(8.37)	(20.09)	(20.46)	(23.84)	(24.01)	(0.66)	(0.67)
N	289	185	81	78	81	78	81	78
R2	0.18	0.22	0.25	0.25	0.10	0.12	0.15	0.16
	Panel B. Quadratic Polynomial in Distance to Potosí							
Mita	11.65**	9.71**	29.46	25.69	-17.3	-15.36	0.94	0.87
	(4.8)	(4.91)	(19.35)	(19.34)	(22.89)	(23.01)	(0.62)	(0.62)
N	289	185	81	78	81	78	81	78
R2	0.18	0.21	0.20	0.22	0.09	0.10	0.18	0.19
	Panel C. Quadratic Polynomial in Distance to Mita Boundary							
Mita	10.78**	9.54*	42.5***	41.72***	-3.46	-4.19	1.14**	1.14**
	(4.44)	(5.02)	(15.29)	(15.21)	(16.98)	(17.27)	(0.47)	(0.47)
N	289	185	81	78	81	78	81	78
R2	0.18	0.20	0.22	0.26	0.16	0.18	0.21	0.23
Mean of outcome for non-Mita Districts	5.81	8.06	3.49	4.84	19.77	27.42	-0.19	-0.26

The Table reports OLS estimates. Observations are at the district level. Robust Standard errors in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1. Origins Rebels is a dummy that takes a value one if the district is the origin place of the rebels. Rebels Side is a dummy that takes a value one if the district supported the rebellion. Loyal Side is a dummy that takes a value of one if the district was against the rebellion. Support intensity represents an index of support/rejection for the rebellion. The intensity variable takes on the values -2 (very opposed to rebellion),-1,0,1,2 (very in favor of rebellion).

Table 3. Effect of Mita on Modern Social Unrest

	Internal Conflict (1980-2001)			Anti-mining Protests (2004-2017)		
Dependent:	Prob. of having a violent event			Prob. of having protests		
	< 100 km (1)	<75 km (2)	< 50 km (3)	< 100 km (4)	<75 km (5)	< 50 km (6)
	Panel A. Quadratic polynomial in latitude and longitude					
Mita	21.06** (10.66)	14.77 (11.38)	11.36 (12.68)	18.67*** (6.27)	21.9*** (6.76)	19.31*** (7.4)
N	289	239	185	289	239	185
R2	0.33	0.32	0.20	0.04	0.03	0.03
	Panel B. Quadratic Polynomial in Distance to Potosí					
Mita	45.95*** (7.11)	45.08*** (7.27)	38.36*** (7.87)	18.46*** (4.89)	20.28*** (5.1)	22.65*** (5.45)
N	289	239	185	289	239	185
R2	0.30	0.28	0.17	0.05	0.04	0.04
	Panel C. Quadratic Polynomial in Distance to Mita Boundary					
Mita	46.49*** (6.86)	44.66*** (7.18)	37.78*** (8)	17.17*** (4.34)	18.48*** (4.51)	22.42*** (5.14)
N	289	239	185	289	239	185
R2	0.28	0.26	0.16	0.04	0.04	0.06
Mean of outcome for non-Mita Districts	26.74	28.57	33.87	3.49	3.90	3.23

Table presents OLS estimates. Observations are at the district level. Robust standard errors in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1. The dependent variable Internal Conflict is a dummy that takes a value of 1 if a violent event occurred in the district. The dependent variable Anti-mining Protests is a dummy that takes a value of one if an anti-mining protest occurred in the district.

Table 4. Effect of Mita on Identity

	Share of population who speaks a native language			Share of district population in 2017 who identifies with			
Dependent:	1961	1981	2017	Indigenous	Mestizo	White	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Panel A. Quadratic polynomial in latitude and longitude						
Mita	-0.61 (2.39)	-3.69 (3)	2.55 (3.48)	0.73 (2.75)	-1.05 (2.55)	-0.08 (0.35)	0.44 (0.54)
N	289	209	289	289	289	289	289
R2	0.43	0.55	0.57	0.64	0.63	0.35	0.18
	Panel B. Quadratic Polynomial in Distance to Potosí						
Mita	8.03*** (1.73)	6.24*** (1.87)	16.65*** (2.47)	10.14*** (1.81)	-9.25*** (1.61)	-0.8*** (0.24)	-0.14 (0.37)
N	289	209	289	289	289	289	289
R2	0.35	0.43	0.45	0.55	0.54	0.28	0.16
	Panel C. Quadratic Polynomial in Distance to Mita Boundary						
Mita	11.34*** (1.97)	12.83*** (2.51)	18.64*** (2.42)	12.9*** (1.96)	-11.7*** (1.74)	-0.86*** (0.22)	-0.41 (0.38)
N	289	209	289	289	289	289	289
R2	0.37	0.46	0.46	0.52	0.52	0.28	0.15
Mean of outcome for non-Mita Districts	84.21	80.55	59.92	74.01	20.98	1.89	3.25

Table presents OLS estimates. Observations are at the district level. Robust Standard errors in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1. The dependent variable in columns (1) to (3) is the percent of people who speak a native language at the district level for 1961, 1981, and 2017. The dependent variable in columns (4) to (7) is the percent of people who identifies with the indigenous, mestizo, white, and another ethnicity.

Table 5. Long-Term Effect on the importance of Peasant Communities

Dependent variable:	To which of the following do you feel more identified to? (% that chooses each option)			Importance of Peasant Communities (PC) in the district				
	Region, Province or District	Peasant Community	Others	% of agricultural land	Number of PC.	% of people affiliated	% formally recognized by State	% with a property title
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Panel A. Quadratic polynomial in latitude and longitude							
Mita	-22.16**	19.97**	2.19	15.03**	1.43*	3.18	0.54	3.75
	(8.97)	(8.16)	(3.34)	(7.5)	(0.82)	(7.17)	(6.79)	(7.69)
N	2,991	2,991	2,991	289	289	289	289	289
R2	0.10	0.10	0.00	0.20	0.40	0.19	0.42	0.21
	Panel B. Quadratic Polynomial in Distance to Potosí							
Mita	-19.72***	20.9***	-1.19	15.85***	1.17	13.99***	12.91***	15.87***
	(5.32)	(5.03)	(2.49)	(5.02)	(0.72)	(4.96)	(4.61)	(5.16)
N	2,991	2,991	2,991	289	289	289	289	289
R2	0.10	0.10	0.00	0.19	0.28	0.19	0.32	0.12
	Panel C. Quadratic Polynomial in Distance to Mita Boundary							
Mita	-16.88***	16.92***	-0.04	14.05***	1.08*	14.67***	17.31***	18.04***
	(5.09)	(4.83)	(2.53)	(4.75)	(0.65)	(4.86)	(4.46)	(5.01)
N	2,991	2,991	2,991	289	289	289	289	289
R2	0.09	0.09	0.00	0.18	0.28	0.00	0.29	0.12
Mean of outcome for Non-Mita Districts	53.05	30.37	16.59	44.10	4.15	4.88	70.99	55.81

The Table reports OLS estimates. Estimates in columns (1) to (3) are at the household level with clustered errors at the district level. Estimates in columns (4) to (8) are at the district level with robust standard errors in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1. Results in columns (1) to (3) are for the probability of an individual selecting that option as the group with which she feels more identification. The dependent variable in column (4) is the district's share of agricultural land exploited by PC. The dependent variable in column (5) is the total number of PC in the district. The dependent variable in column (6) is the share of people affiliated with PC divided by the district's total population. The dependent variables in columns (6) and (7) are the share of PC recognized by the State and the share of PC with a property title, respectively.

Table 6. Effect of Mita on Migration Rate

	Dependent: Migration Rate in 2017									
	Inmigration Rate					Emigration Rate				
	All sample	<=17 years old	between [18 - 39]	between [40 - 64]	>=65 years old	All sample	<=17 years old	between [18 - 39]	between [40 - 64]	>=65 years old
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Panel A. Quadratic polynomial in latitude and longitude									
Mita	-6.91***	-2.82**	-6.93**	-7.51***	-6.91**	0.21	-0.33	1.22	0.02	0.63
	(2.37)	(1.36)	(2.73)	(2.5)	(3.07)	(2.18)	(1.23)	(2.75)	(2.98)	(2.49)
N	289	289	289	289	289	289	289	289	289	288
R2	0.35	0.37	0.33	0.31	0.25	0.19	0.27	0.19	0.14	0.11
	Panel B. Quadratic Polynomial in Distance to Potosí									
Mita	-3.83**	-2.4**	-0.82	-4.54***	-7.63***	-4.09***	-2.61***	-3.8**	-5.08**	-4.1**
	(1.64)	(1.08)	(1.92)	(1.68)	(2)	(1.49)	(0.88)	(1.89)	(1.99)	(1.58)
N	289	289	289	289	289	289	289	289	289	288
R2	0.30	0.30	0.25	0.27	0.25	0.16	0.23	0.15	0.13	0.08
	Panel C. Quadratic Polynomial in Distance to Mita Boundary									
Mita	-5.62***	-3.69***	-3.19*	-5.49***	-8.61***	-4.48***	-3.24***	-4.48**	-5.15***	-3.55**
	(1.6)	(1.01)	(1.86)	(1.62)	(1.95)	(1.38)	(0.83)	(1.77)	(1.82)	(1.46)
N	289	289	289	289	289	289	289	289	289	288
R2	0.30	0.28	0.23	0.30	0.24	0.16	0.23	0.16	0.12	0.05
Mean of outcome for non-Mita Districts	45.67	18.27	56.94	52.14	45.85	18.12	10.49	23.94	22.42	14.91

The Table reports OLS estimates. Observations are at the district level. Robust Standard errors in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1. The dependent variable in Immigration Rate is the percentage of the population residing in the origin district but born in another district divided by the population in the district. Similarly, Emigration Rate is the percentage of the population born in the district but living outside divided by the population born there.

Table 7. Effect of Mita on Beliefs about the Causes of Economic Development

	Do you think ….. is an obstacle to the development of the country? (multiple choice question)						
Dependent:	Says "I don't know" to all options	Says "IDK" to at least one option	Colonial History	Foreign Inter-vention	Bad Govern-ment	People's attitude	Scarcity of Natural Resources
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Panel A. Quadratic polynomial in latitude and longitude						
Mita	24.83***	19.42***	28.86***	9.02	5.04	6.84	6.63
	(6.84)	(7.02)	(9.5)	(9.88)	(5.94)	(8.53)	(8.02)
N	1,446	1,446	816	861	1,036	932	1,014
R2	0.15	0.08	0.02	0.04	0.08	0.02	0.03
	Panel B. Quadratic Polynomial in Distance to Potosí						
Mita	21.18***	16.25***	13.99*	9.39	5.13	-1.09	6.15
	(4.85)	(5.47)	(7.3)	(6.2)	(4.71)	(6.05)	(5.97)
N	1,446	1,446	816	861	1,036	932	1,014
R2	0.15	0.08	0.01	0.03	0.07	0.01	0.03
	Panel C. Quadratic Polynomial in Distance to Mita Boundary						
Mita	24.81***	20.32***	10.55	5.82	3.62	-2.74	2.59
	(5.11)	(5.38)	(7.52)	(5.61)	(5.29)	(6.5)	(5.84)
N	1,446	1,446	816	861	1,036	932	1,014
R2	0.14	0.07	0.01	0.04	0.06	0.00	0.03
Mean of outcome for Non-Mita Districts	14.88	39.45	48.13	50.75	81.56	64.45	45.96

The Table presents OLS estimates. Observations are at the household level with standard errors clustered at the district level in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1. Columns (1) and (2) present results for the share of the respondents that said "I don't know" to all alternatives, or at least to one, respectively. Columns (3) to (7) present results for the share that says that each alternative is "important" or "very important," excluding the ones that answer "I don't know."

Table 8. Effect of Mita on Beliefs on Democracy

Dependent:	Do you know what democracy is? R: Yes.	If you know what democracy is, what do you think democracy is for? (multiple answer question)					
		Respect people's rights	Improving my family's wellbeing	Electing authorities	Being repre-sented	Nothing at all	Number of options selected
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Panel A. Quadratic polynomial in latitude and longitude						
Mita	-18.99**	-7.91	-5.44	7.96	-4.25	-2.59	-0.1
	(8.49)	(7.58)	(5.94)	(8.07)	(7.61)	(2.8)	(0.19)
N	3,098	857	857	857	857	857	857
R2	0.07	0.03	0.05	0.01	0.03	0.00	0.06
	Panel B. Quadratic Polynomial in Distance to Potosí						
Mita	-15.11***	-4.47	-11.07**	0.16	-15.05***	-0.56	-0.3**
	(2.2)	(5.52)	(4.35)	(5.53)	(5.34)	(2.21)	(0.12)
N	3,098	857	857	857	857	857	857
R2	0.07	0.03	0.04	0.01	0.03	0.00	0.06
	Panel C. Quadratic Polynomial in Distance to Mita Boundary						
Mita	-12.24***	-5.75	-13.85***	-1.65	-14.45***	-1.56	-0.36***
	(2.15)	(5.48)	(4.45)	(5.5)	(5.3)	(2.2)	(0.12)
N	3,098	857	857	857	857	857	857
R2	0.05	0.03	0.04	0.01	0.02	0.00	0.06
Mean of outcome for Non-Mita Districts	31.08	57.63	28.24	55.34	46.56	5.73	1.88

The Table reports OLS estimates. Observations are at the household level, with standard errors clustered at the district level in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1. The dependent variable in column (1) is the percentage of respondents who report knowing what democracy is. Columns (2) to (6) present results for the percentage of respondents who select each alternative among those who report knowing what democracy is. Column (7) presents results for the average number of alternatives selected, not counting "nothing at all."

Table 9. Robustness of the Effect of Mita on Social Unrest when including Bad Controls

	Tupac Amarú II Reb. (1781-1783)		Internal Conflict (1980-2001)				Anti-mining Protests (2004-2017)			
Dependent:	Prob. of sup. the rebellion		Prob. of having a violent event				Prob. of having protests			
Bad Control:	No Bad Controls	Reparto per capita in 1754	No Bad Controls	% with Elect. 1981	% with Dirt floor 1981	Av. N goods 1981	No Bad Controls	% with Electr. 2007	% with Dirt floor 2007	Av. N of goods 2007
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Panel A. Quadratic polynomial in latitude and longitude									
Mita	15.83*	15.74*	25.88*	26.2*	25.88*	25.95*	18.67***	19.52***	18.49***	18.56***
	(8.18)	(8.22)	(13.5)	(13.48)	(13.53)	(13.56)	(6.27)	(6.33)	(6.23)	(6.31)
Bad Control		-0.31		25.93	0.34	9.28		-20.52	-14.28	-1.05
		(0.37)		(30.68)	(4.84)	(10.54)		(17.59)	(15.37)	(4.96)
N	233	233	203	203	203	203	289	289	289	289
R2	0.33	0.33	0.30	0.30	0.29	0.30	0.04	0.04	0.04	0.03
	Panel B. Quadratic Polynomial in Distance to Potosí									
Mita	14.9**	14.68**	47.91***	48.17***	48.02***	48.89***	18.46***	18.73***	18.78***	18.01***
	(6.17)	(6.13)	(8.63)	(8.88)	(8.68)	(8.81)	(4.89)	(4.91)	(4.9)	(5.14)
Bad Control		-0.38		4.07		7.6		-15.76	-10.47	-1.16
		(0.36)		(30.51)		(10.46)		(16.32)	(13.87)	(4.72)
N	233	233	203	203	203	203	289	289	289	289
R2	0.34	0.34	0.28	0.27	0.27	0.27	0.05	0.05	0.05	0.04
	Panel C. Quadratic Polynomial in Distance to Mita Boundary									
Mita	14.9**	12.61**	49.48***	49.31***	49.5***	49.32***	17.17***	17.18***	17.28***	16.41***
	(6.17)	(5.82)	(8.08)	(8.41)	(8.12)	(8.21)	(4.34)	(4.34)	(4.34)	(4.65)
Bad Control		-0.85**		-2.57		-1.36		-10.24	-8.68	-2.09
		(0.37)		(34.6)		(9.51)		(17.12)	(14.43)	(4.71)
N	233	233	203	203	203	203	289	289	289	289
R2	0.34	0.33	0.25	0.24	0.24	0.24	0.04	0.04	0.04	0.04

The Table reports OLS estimates. Observations are at the district level. Robust standard errors in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. The dependent variables are described in Tables 2 and 3. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1. The set of bad controls includes the amount of *repartimiento* assigned to each province divided by the indigenous population in 1754, the percent of HH with electricity and dirt floors in 1981 and 2007, and the average numbers of durable goods in both years.

Table 10. Robustness of the Effect of Mita on Social Unrest when including Weather Shocks

	Tupac Amarú II Rebellion (1781-1783)		Internal Conflict (1980-2001)		Anti-mining Protests (2004-2017)	
Dependent:	Prob. of supporting the rebellion		Prob. of having a violent event		Prob. of having protests	
Bad Control:	Benchmark	With Weather Shock	Benchmark	With Weather Shock	Benchmark	With Weather Shock
	(1)	(2)	(3)	(4)	(5)	(6)
	Panel A. Quadratic polynomial in latitude and longitude					
Mita	12.49** (6.18)	13.08** (6.25)	21.06** (10.66)	20.72* (10.76)	18.67*** (6.27)	18.41*** (6.3)
Weather Shock		-8.33** (3.6)		-2.06 (6.64)		-1.13 (1.2)
N	289	289	289	289	289	289
R2	0.283	0.299	0.332	0.330	0.038	0.038
	Panel B. Quadratic Polynomial in Distance to Potosí					
Mita	14.89*** (4.39)	15.07*** (4.39)	45.95*** (7.11)	46.15*** (7.24)	18.46*** (4.89)	17.47*** (4.93)
Weather Shock		-7.9** (3.51)		1.04 (6.33)		-1.12 (1.22)
N	289	289	289	289	289	289
R2	0.29	0.30	0.30	0.30	0.05	0.05
	Panel C. Quadratic Polynomial in Distance to Mita Boundary					
Mita	11.76*** (3.88)	14.24*** (4.31)	46.49*** (6.86)	45.92*** (6.93)	17.17*** (4.34)	16.14*** (4.25)
Weather Shock		-9.21*** (3.28)		-2.87 (6.26)		-2.32** (1.08)
N	289	289	289	289	289	289
R2	0.27	0.30	0.28	0.28	0.04	0.05

Observations are at the district level. Robust Standard errors in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1. The weather shock variables in columns (2), (4), and (6) are precipitation measures in the three social unrest periods. The dependent variables are described in Tables 2 and 3.

Table 11. Long-Term Effect of Mita on Provision of Public Goods

Dependent:	Log. Schools in 2019	Enrollment 2017		Literacy Rate 2017		Schooling 2017		Road infrastructure 2019		
		Enrollment rate		Literacy Rate		Average years of schooling		Prob. of having a paved road	Road Density	Paved Road Density
		Primary	Secondary	Younger	Older	Younger	Older			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Panel A. Quadratic polynomial in latitude and longitude									
Mita	0.27*	0.08	-0.8	0.42	-0.97	0.09	0.07	12.19	0.01	0
	(0.16)	(0.67)	(0.84)	(0.66)	(1.55)	(0.06)	(0.45)	(9.19)	(0.04)	(0.02)
N	288	288	288	288	288	288	288	288	288	288
R2	0.34	0.06	0.02	0.02	0.29	0.07	0.08	0.24	0.55	0.18
	Panel B. Quadratic Polynomial in Distance to Potosí									
Mita	0.15	0.07	0.66	0.69*	-2.31**	0.13***	-0.37	-6.56	-0.02	-0.02*
	(0.12)	(0.4)	(0.66)	(0.39)	(1.03)	(0.04)	(0.31)	(6.73)	(0.03)	(0.01)
N	288	288	288	288	288	288	288	288	288	288
R2	0.25	0.07	0.02	0.03	0.29	0.07	0.08	0.19	0.52	0.15
	Panel C. Quadratic Polynomial in Distance to Mita Boundary									
Mita	0.23**	-0.4	0.45	0.59	-2.64***	0.12***	-0.33	-3.96	0.01	-0.01
	(0.11)	(0.38)	(0.59)	(0.38)	(0.96)	(0.03)	(0.27)	(6.62)	(0.03)	(0.01)
N	288	288	288	288	288	288	288	288	288	288
R2	0.29	0.04	0.00	0.03	0.29	0.07	0.07	0.18	0.52	0.14
Mean of outcome for non-Mita Districts	2.54	97.00	93.83	93.86	83.05	3.14	5.89	56.47	0.38	0.05

The Table reports OLS estimates. Observations are at the district level. Robust Standard errors in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1. Dependent variables related to education outcomes are the district's numbers of schools in 2019 (column 1), percent of school-age children attending school (columns 2 and 3), percent of literacy population (columns 4 and 5), and average years of schooling (columns 6 and 7). The dependent variables of road infrastructure are: a dummy takes value one if the district has a paved road (column 8), the total long road divided by the total district's area in square kilometers (column 9), and the total paved roads divided for entire district's area in square kilometers (column 10). "Younger" represented people are between 6 and 18 years old. "Older" represents people who are older than 18 years old.

Appendix 1

Appendix Tables

Table A.I.1. Descriptive Statistics

		N	Mean	S.D.	Min	Max
Treatment, control and interaction variables						
Mining Mita (1=yes)		289	0.7	0.5	0.0	1.0
Boundary segment 1		289	0.2	0.4	0.0	1.0
Boundary segment 2		289	0.2	0.4	0.0	1.0
Boundary segment 3		289	0.3	0.5	0.0	1.0
Dummy if mining district (1=yes)		289	0.1	0.3	0.0	1.0
Hyperbolic log. of distance to closest mining district (negative)		289	-17.4	6.8	-22.7	0.7
Table 1. Geographical and Demographic controls						
Average Elevation (thousand of meters above sea level)		289	3.9	0.5	2.4	4.8
Average Slope gradient		289	8.0	3.8	0.3	17.6
Weight Long-Term Historical precipitation		289	6.7	2.2	2.5	21.2
Weight Long-Term Air Temperature		289	8.2	4.2	-1.1	20.6
Share of Land Tenure 1500 A.D.		289	5.1	15.0	0.0	100.0
Population Density 1500 A.D.		289	9.7	11.4	0.7	108.7
Table 2. Historical Social Unrest						
Tupac Amarú Rebellion 1781-1783	Dummy if evidence of this district be a origin place of rebels (100=yes)	289	10.0	30.1	0.0	100.0
	Dummy if evidence of this district supporting rebellion (100=yes)	81	35.8	48.2	0.0	100.0
	Dummy if evidence of this going against of the rebellion (100=yes)	81	32.1	47.0	0.0	100.0
	Level of supporting for the rebellion	81	0.2	1.2	-2.0	2.0
Table 3. Modern Social Unrest						
Internal Violence 1980-2000	Dummy if there was a terrorist attack in the district (100=yes)	289	61.6	48.7	0.0	100.0
Anti-mining protests (2004-2017)	Dummy if there was at least 1 anti-mining protest in the district (100=yes)	289	13.1	33.9	0.0	100.0
Table 4. Impact of Identity						
Share of pop that speaks native language 1961		289	93.0	15.4	3.8	99.9
Share of pop that speaks native language 1981		209	88.6	18.2	1.9	99.8
Share of pop that speaks native language 2017		289	75.3	20.9	4.5	98.9
Share of pop in 2017 that identifies with: Indigenous		289	86.0	17.3	6.7	100.0
Share of pop in 2017 that identifies with: Mestizo		289	10.5	15.3	0.0	81.8
Share of pop in 2017 that identifies with: White		289	1.1	1.5	0.0	9.4
Share of pop in 2017 that identifies with: Other		289	2.6	2.5	0.0	13.6
Table 5. Long-Term Effect on Self-Identification						
To which of the following do you feel more identified to?	Region, Province or District	2991	44.4	49.7	0.0	100.0
	Peasant Community	2991	39.5	48.9	0.0	100.0
	Others	2991	16.1	36.7	0.0	100.0
Percent of agricultural land		289	55.2	35.9	0.0	99.7
Number of Peasant Communities		289	5.6	5.4	0.0	32.0
Percent of people affiliated		289	55.3	35.2	0.0	100.0
Percent of formally recognized by State		289	88.7	30.7	0.0	100.0
Percent with a property title		289	70.9	34.9	0.0	100.0

Table A.I.1. Descriptive Statistics

Table 6. Migration Rate

Immigration Rate in 2017: All sample	289	39.3	12.5	14.5	83.6
Immigration Rate in 2017: <=17 years old	289	14.4	8.1	2.4	56.8
Immigration Rate in 2017: between [18 - 39]	289	51.5	13.6	20.8	91.2
Immigration Rate in 2017: between [40 - 64]	289	46.4	13.1	17.8	88.5
Immigration Rate in 2017: >=65 years old	289	38.2	14.3	9.9	83.1
Emigration Rate in 2017: All sample	289	14.0	9.4	2.5	47.8
Emigration Rate in 2017: <=17 years old	289	7.4	5.5	1.0	31.6
Emigration Rate in 2017: between [18 - 39]	289	19.4	12.2	4.1	64.6
Emigration Rate in 2017: between [40 - 64]	289	17.8	12.4	2.7	61.3
Emigration Rate in 2017: >=65 years old	288	11.9	9.8	0.5	60.2

Table 7. History

Do you think is an obstacle to the development of the country?	Says "I don't know" to all options	1696	23.9	42.7	0.0	100.0
	Says "IDK" to at least one option	1696	42.0	49.4	0.0	100.0
	Colonial History	1022	53.5	49.9	0.0	100.0
	Foreign Intervention	1078	59.7	49.1	0.0	100.0
	Bad Government	1274	90.4	29.4	0.0	100.0
	People's attitude	1161	67.5	46.8	0.0	100.0
	Scarcity of Natural Resources	1246	48.7	50.0	0.0	100.0

Table 8. Democracy

Do you know what democracy is? (100=yes)		3407	31.3	46.4	0.0	100.0
If you know what democracy is, what do you think democracy is for? (multiple answer question)	Respect people's rights	1067	51.2	50.0	0.0	100.0
	Improving my family's wellbeing	1067	22.2	41.6	0.0	100.0
	Electing authorities	1067	58.2	49.3	0.0	100.0
	Being represented	1067	42.5	49.5	0.0	100.0
	Nothing at all	1067	4.9	21.5	0.0	100.0
Number of options selected (different from "Nothing")		1067	1.7	1.2	0.0	4.0

Table 9. Bad Controls

Reparto per capita for indigenous pop in 1974	233	9.8	5.4	3.9	22.1
Percent with Electricity 1981	203	0.0	0.1	0.0	0.7
Percent with Dirt floor 1981	203	0.7	0.7	0.0	6.6
Average of goods 1981	203	1.0	0.4	0.2	2.0
Percent with Electricity 2007	289	0.1	0.1	0.0	1.2
Percent with Dirt floor 2007	289	0.2	0.2	0.0	1.6
Average of goods 2007	289	1.1	0.5	0.2	3.2

Table 10. Weather Shocks

Weather shock Tupac Amaru	289	2.5	0.8	0.0	5.0
Weather shock Shining Path	289	0.9	1.0	0.0	3.0
Weather shock Anti-mining protests	289	4.4	2.5	0.0	11.0

Table 11. Public Goods

Educational Outcomes	Log of schools in 2019	288	2.8	0.9	0.7	6.2
	Primary Enrollment rate in 2017	288	96.4	3.0	81.7	100.0
	Secondary Enrollment rate in 2017	288	94.1	4.5	50.0	100.0
	Literacy Rate for young people	288	94.4	2.6	78.8	100.0
	Literacy Rate for older people	288	80.9	7.3	62.5	96.3
	Avg. of years of schooling for young people	288	3.2	0.2	2.4	4.5
	Avg.of years of schooling for older people	288	5.6	1.9	2.6	13.2
Road infrastructure 2019	Prob. of having a paved road	288	58.7	49.3	0.0	100.0
	Road Density	288	0.4	0.3	0.0	2.1
	Paved Road Density	288	0.0	0.1	0.0	0.4

Table A.I.1. Descriptive Statistics						
Table A.I.2 Crime						
Victim of Crime	Dummy if household be a victim of any crime (100=yes)	4792	32.0	46.6	0.0	100.0
	Dummy if household be a victim of robbery (100=yes)	4792	27.2	44.5	0.0	100.0
	Dummy if household be a victim of violent crime (100=yes)	4792	7.4	26.1	0.0	100.0
	Dummy if household be a victim of money crime (100=yes)	4792	1.7	13.0	0.0	100.0
Table A.I.3 Ethnic						
Share of indigenous population in 1876		246	67.3	22.2	11.9	99.8
Share of mestizo population in 1876		246	19.7	17.7	0.0	75.5
Share of white population in 1876		246	12.8	13.4	0.0	57.6
Share of indigenous population in 1940		287	72.3	22.0	0.0	99.1
Share of white population in 1940		287	27.3	21.6	0.7	98.1
Table A.I.4 History IDK						
Do you think is an obstacle to the development of the country? Answers: "I don't know (*IDK*)"	Colonial History	1446	43.6	49.6	0.0	100.0
	Foreign Intervention	1446	40.5	49.1	0.0	100.0
	Bad Government	1446	28.4	45.1	0.0	100.0
	People's attitude	1446	35.5	47.9	0.0	100.0
	Scarcity of Natural Resources	1446	29.9	45.8	0.0	100.0
Table A.I.5 Placebo Beliefs						
Household says that "Does not know …" in following questions	Subjective Wellbeing	3021	0.7	8.3	0.0	100.0
	Educational level of mother	3021	7.8	26.9	0.0	100.0
	If house had construction license	3061	6.3	24.4	0.0	100.0
	If house was designed by professional	3061	5.9	23.5	0.0	100.0
Problems for surveys	Survey was incomplete	4080	4.5	20.7	0.0	100.0
	Survey was rejected	4080	2.7	16.2	0.0	100.0

TableA.I.2 Effect of Mita on probability of being victim of a crime

Dependent:	Probability of being a victim of: Any Crime			Robbery			Violent Crime			Violent Economic crime		
	< 100 km	<75 km	< 50 km	< 100 km	<75 km	< 50 km	< 100 km	<75 km	< 50 km	< 100 km	<75 km	< 50 km
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Panel A. Quadratic polynomial in latitude and longitude											
Mita	-8.68**	-8.18*	-11.07**	-9.47**	-10.34***	-13.74***	-1.06	1.35	2.01	-0.85	-0.34	-1.36
	(3.83)	(4.7)	(4.27)	(3.55)	(3.58)	(3.91)	(1.72)	(2.41)	(2.66)	(0.74)	(1.1)	(1.12)
N	4,792	2,976	2,777	4,792	2,976	2,777	4,792	2,976	2,777	4,792	2,976	2,777
R2	0.03	0.01	0.02	0.03	0.01	0.02	0.00	0.01	0.01	0.00	0.00	0.00
	Panel B. Quadratic Polynomial in Distance to Potosí											
Mita	-8.2**	-9.65**	-12.67***	-7.09*	-8.47**	-12.78***	-1.8	-1.87	-1.07	-1.22	-1.19	-1.86**
	(3.77)	(3.89)	(3.62)	(3.72)	(3.67)	(2.93)	(1.46)	(1.66)	(1.98)	(0.73)	(0.75)	(0.72)
N	4,792	2,976	2,777	4,792	2,976	2,777	4,792	2,976	2,777	4,792	2,976	2,777
R2	0.03	0.01	0.02	0.03	0.01	0.02	0.01	0.01	0.01	0.00	0.00	0.00
	Panel C. Quadratic Polynomial in Distance to Mita Boundary											
Mita	-10.21**	-10.3**	-13.21***	-9.21**	-9.79***	-12.61***	-2.29	-1.72	-2.28	-1.31*	-1.49*	-2.12***
	(3.92)	(3.87)	(4.04)	(3.58)	(3)	(3.05)	(1.75)	(1.97)	(2.17)	(0.74)	(0.78)	(0.73)
N	4,792	2,976	2,777	4,792	2,976	2,777	4,792	2,976	2,777	4,792	2,976	2,777
R2	0.02	0.01	0.02	0.03	0.01	0.02	0.00	0.01	0.01	0.00	0.00	0.00
Mean of outcome for Non-Mita Districts	32.06	32.06	32.06	26.43	26.43	26.43	8.86	8.86	8.86	1.83	1.83	1.83

The tables reports OLS estimates. Observations are at the household level with standard errors clustered at the district level in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1.

Table A.I.3 . Effect of Mita on Ethnic

Dependent:	Share of the population by ethnic group (classified by the surveyor)									
	In 1876						In 1940			
	Indigenous		Mestizo		White		Indigenous		White	
	< 100 km (1)	< 50 km (2)	< 100 km (3)	< 50 km (4)	< 100 km (5)	< 50 km (6)	< 100 km (7)	< 50 km (8)	< 100 km (9)	< 50 km (10)
	Panel A. Quadratic polynomial in latitude and longitude									
Mita	2.58	7.81*	-4.53	-7.88**	1.7	-0.11	-5.28	-4.53	6.18*	4.56
	(4.13)	(4.48)	(3.44)	(3.44)	(2.8)	(3.17)	(3.68)	(3.93)	(3.6)	(3.93)
N	246	173	246	173	246	173	287	185	287	185
R2	0.42	0.43	0.38	0.36	0.29	0.15	0.45	0.50	0.50	0.50
	Panel B. Quadratic Polynomial in Distance to Potosí									
Mita	0.46	2.81	0.68	-2.41	-1.12	-0.46	0.72	-0.17	-1.24	0.19
	(2.74)	(2.87)	(2.26)	(2.36)	(1.78)	(1.91)	(2.6)	(2.75)	(2.54)	(2.74)
N	246	173	246	173	246	173	287	185	287	185
R2	0.39	0.41	0.29	0.33	0.19	0.08	0.44	0.44	0.48	0.43
	Panel C. Quadratic Polynomial in Distance to Mita Boundary									
Mita	2.18	1.79	0.84	-1.61	-3*	-0.24	4.78*	1.41	-4.93*	-1.38
	(2.57)	(2.93)	(2.15)	(2.5)	(1.73)	(1.84)	(2.54)	(2.77)	(2.54)	(2.76)
N	246	173	246	173	246	173	287	185	287	185
R2	0.38	0.38	0.31	0.29	0.21	0.08	0.39	0.41	0.44	0.41
Mean of outcome for non-Mita Districts	68.62	66.58	17.08	22.29	14.11	11.00	65.46	67.78	34.43	32.11

The table reports OLS estimates. Observations are at the district level. Robust standard errors clustered at the district level in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1.

Table A.I.4 Effect of Mita on not-knowing about the causes of development

	Do you think is an obstacle to the development of the country?				
Dependent:	Colonial History	Foreign Intervention	Bad Government	People's attitude	Scarcity of Natural Resources
	(1)	(2)	(3)	(4)	(5)
	Panel A. Quadratic polynomial in latitude and longitude				
Mita	21.4***	18.89***	27.67***	25.86***	22.98***
	(7.37)	(6.96)	(6.89)	(7.64)	(7.05)
N	1,446	1,446	1,446	1,446	1,446
R2	0.09	0.09	0.16	0.09	0.13
	Panel B. Quadratic Polynomial in Distance to Potosí				
Mita	17.43***	18.61***	22.92***	18.87***	19.52***
	(5.8)	(5.34)	(4.96)	(5.33)	(5)
N	1,446	1,446	1,446	1,446	1,446
R2	0.09	0.09	0.15	0.09	0.12
	Panel C. Quadratic Polynomial in Distance to Mita Boundary				
Mita	22.02***	22.3***	26.44***	23.17***	23.58***
	(5.6)	(5.2)	(5.22)	(5.19)	(5.33)
N	1,446	1,446	1,446	1,446	1,446
R2	0.08	0.08	0.15	0.08	0.11
Mean of outcome for Non-Mita Districts	35.29	31.14	15.57	26.99	18.69

The table reports OLS estimates. Observations are at the household level with standard errors clustered at the district level in parentheses. For all regressions there are 116 clusters. All regressions include districts within 100 km of the Mita boundary and boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1.

Table A.I.5 Effect of Mita on Beliefs non-political related questions

	Says that "Does not know …"								Problems in surveys			
Dependent:	Subjective Wellbeing		Educational level of mother		If house had construction license		If house was designed by professional		Survey was incomplete		Survey was rejected	
	< 100 km (1)	< 50 km (2)	< 100 km (3)	< 50 km (4)	< 100 km (5)	< 50 km (6)	< 100 km (7)	< 50 km (8)	< 100 km (9)	< 50 km (10)	< 100 km (11)	< 50 km (12)
	Panel A. Quadratic polynomial in latitude and longitude											
Mita	-1.46*	-0.35	-1.96	-0.99	-6.27**	-5.11**	-5.82**	-4.87*	0.02	-0.63	-0.56	-0.79
	(0.79)	(0.37)	(2.32)	(2.45)	(2.42)	(2.56)	(2.34)	(2.57)	(1.02)	(1.21)	(0.75)	(0.59)
N	3,021	1,815	3,021	1,815	3,061	1,807	3,061	1,807	4,080	2,230	4,080	2,230
R2	0.01	0.02	0.00	0.01	0.03	0.01	0.03	0.02	0.04	0.01	0.04	0.00
	Panel B. Quadratic polynomial in distance to Potosi											
Mita	-0.76	-0.7	-3.63**	-2.85*	-4.22***	-3.83***	-4.15***	-3.67**	-1.81***	-1.49**	-0.67	-0.04
	(0.51)	(0.52)	(1.66)	(1.55)	(1.38)	(1.44)	(1.32)	(1.43)	(0.67)	(0.69)	(0.47)	(0.43)
N	3,021	1,815	3,021	1,815	3,061	1,807	3,061	1,807	4,080	2,230	4,080	2,230
R2	0.01	0.01	0.00	0.01	0.03	0.01	0.03	0.02	0.04	0.01	0.04	0.00
	Panel B. Quadratic polynomial in distance to Boundary											
Mita	-0.56	-0.67	-3.9**	-2.41	-3.3**	-3.77***	-3.28**	-3.64***	-1.15	-1.03	0.15	-0.02
	(0.48)	(0.52)	(1.63)	(1.63)	(1.35)	(1.32)	(1.31)	(1.34)	(0.8)	(0.72)	(0.59)	(0.41)
N	3,021	1,815	3,021	1,815	3,061	1,807	3,061	1,807	4,080	2,230	4,080	2,230
R2	0.01	0.01	0.01	0.01	0.03	0.01	0.03	0.02	0.03	0.00	0.03	0.00
Mean of outcome for Non-Mita Districts	0.97	0.81	9.92	8.27	6.30	6.05	6.05	5.72	4.23	2.65	0.92	0.88

The table reports OLS estimates. Observations are at the household level. Standard errors clustered at the district level in parentheses. For all regressions there are 193 clusters. All regressions include geographic controls and boundary segment fixed effects. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1.

2. Appendix II

Table A.II.2. Effect of Mita on support to the Tupac Amaru II Rebelion (1780 - 1783)

	Origins Rebels		**Rebels Position**		**Loyal Position**		**Support Intensity**	
Dependent:	Prob. of be a origin place of rebels		Prob. of supporting rebellion		Prob. of going against of the rebellion		Level of supporting for the rebellion	
	< 100 km (1)	< 50 km (2)	< 100 km (3)	< 50 km (4)	< 100 km (5)	< 50 km (6)	< 100 km (7)	< 50 km (8)
	Panel A. Cubic polynomial in latitude and longitude							
Mita	5.22 (7.36)	3.9 (9.01)	34.22 (21.5)	32.02 (21.65)	-3.29 (23.68)	-1.48 (24.18)	0.91 (0.67)	0.87 (0.68)
N	289	185	81	78	81	78	81	78
R2	0.20	0.27	0.27	0.25	0.08	0.09	0.16	0.15
	Panel B. Cubic Polynomial in Distance to Potosí							
Mita	11.38** (4.71)	8.01* (4.77)	32.08 (20.52)	27.79 (20.65)	-13.52 (23.03)	-11.05 (23.28)	0.96 (0.64)	0.89 (0.65)
N	289	185	81	78	81	78	81	78
R2	0.19	0.24	0.20	0.21	0.09	0.10	0.17	0.18
	Panel C. Cubic Polynomial in Distance to Mita Boundary							
Mita	10.75** (4.45)	9.66* (4.97)	42.21*** (15.9)	41.58*** (15.63)	-3.51 (17.05)	-4.78 (16.92)	1.14** (0.48)	1.14** (0.47)
N	289	185	81	78	81	78	81	78
R2	0.18	0.20	0.25	0.25	0.15	0.24	0.22	0.22
Mean of outcome for non-Mita Districts	5.81	8.06	3.49	4.84	19.77	27.42	-0.19	-0.26

The table reports OLS estimates. Observations are at the district level. The dependent variable in Origins Rebels is a dummy that takes a value of 1 if the district is the origin place of the rebels. Dependent variables Position sample are dummies that take the value of 1 if the historical record identifies the district in support or against the rebellion. Support intensity represents an index of support/rejection for the rebellion where the community and the cacique take a particular position: "community and cacique were on loyalist side", "only one of them took a loyal position", "they were at odds or none of them took a position", "one of them supported the rebellion", "both of them took a support position". The intensity variable takes on the values -2,-1,0,1,2. Robust Standard errors in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1.

Table A.II.3. Effect of Mita on Modern Social Unrest

	Internal Conflict (1980-2001)			Anti-mining Protests (2004-2017)		
Dependent:	Prob. of having a violent event			Prob. of having protests		
	< 100 km	<75 km	< 50 km	< 100 km	<75 km	< 50 km
	(1)	(2)	(3)	(4)	(5)	(6)
	Panel A. Cubic polynomial in latitude and longitude					
Mita	20.69*	14.73	13.69	17.98***	22.42***	19.82**
	(10.93)	(11.6)	(13.06)	(6.61)	(7.01)	(7.76)
N	289	239	185	289	239	185
R2	0.34	0.33	0.22	0.03	0.03	0.03
	Panel B. Cubic Polynomial in Distance to Potosí					
Mita	46.3***	45.38***	38.5***	18.63***	20.66***	22.8***
	(7.05)	(7.21)	(7.9)	(4.93)	(5.14)	(5.47)
N	289	239	185	289	239	185
R2	0.30	0.27	0.17	0.04	0.04	0.04
	Panel C. Cubic Polynomial in Distance to Mita Boundary					
Mita	46.49***	44.75***	37.72***	17.28***	18.78***	22.35***
	(6.87)	(7.19)	(8.03)	(4.27)	(4.56)	(5.17)
N	289	239	185	289	239	185
R2	0.28	0.25	0.16	0.06	0.04	0.06
Mean of outcome for non-Mita Districts	26.74	28.57	33.87	3.49	3.90	3.23

The table reports OLS estimates. Observations are at the district level. Dependent variable in Internal Conflict and Anti-mining Protests are dummies that take a value of 1 if there was a violent or anti mining event in the district, respectively. Robust Standard errors in parentheses. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1.

Table A.II.4. Effect of Mita on Identity

	Share of population that speaks native language			Share of population in 2017 that identifies with			
Dependent:	1961	1981	2017	Indigenous	Mestizo	White	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Panel A. Cubic polynomial in latitude and longitude						
Mita	0.1 (2.13)	-2.46 (2.65)	2.91 (3.55)	1.15 (2.82)	-1.2 (2.65)	-0.22 (0.37)	0.3 (0.56)
N	289	209	289	289	289	289	289
R2	0.54	0.67	0.58	0.66	0.65	0.35	0.23
	Panel B. Cubic Polynomial in Distance to Potosí						
Mita	8.46*** (1.73)	9.26*** (2.24)	16.86*** (2.45)	10.43*** (1.81)	-9.47*** (1.62)	-0.81*** (0.24)	-0.21 (0.37)
N	289	209	289	289	289	289	289
R2	0.39	0.47	0.45	0.56	0.55	0.28	0.19
	Panel C. Cubic Polynomial in Distance to Mita Boundary						
Mita	11.34*** (1.98)	13*** (2.53)	18.63*** (2.43)	12.9*** (1.97)	-11.7*** (1.75)	-0.87*** (0.22)	-0.4 (0.38)
N	289	209	289	289	289	289	289
R2	0.37	0.46	0.45	0.52	0.51	0.29	0.15
Mean of outcome for non-Mita Districts	84.21	80.55	59.92	74.01	20.98	1.89	3.25

Observations are at the district level. Robust Standard errors in parentheses. Dependent variable in columns (1) to (3) is the percent people who speak a native language at district level for 1961, 1981 and 2017. The dependent variable for identity were calculated from the respondent's answer to the question: Due to your customs and ancestors, do you feel or consider?. All regressions include boundary segment fixed effects, geographic, climatic, and historical population as controls. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1.

Table A.II.5. Long-Term Effect on the importance of Peasant Communities

Dependent variable:	To which of the following do you feel more identified to? (% that chooses each option)			Importance of Peasant Communities (PC) in district				
	Region, Province or District	Peasant Community	Others	% of agricultural land	Number of PC	% of people affiliated	% formally recognized by State	% with a property title
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Panel A. Cubic polynomial in latitude and longitude							
Mita	-23.74***	21.03***	2.71	10.12	1.52*	2.62	-0.12	2.26
	(8.75)	(7.8)	(3.61)	(7.42)	(0.9)	(7.48)	(6.88)	(8.07)
N	2,991	2,991	2,991	289	289	289	289	289
R2	0.11	0.11	0.00	0.22	0.39	0.20	0.44	0.21
	Panel B. Cubic Polynomial in Distance to Potosí							
Mita	-19.77***	20.84***	-1.07	16.42***	1.21*	14.3***	13.59***	16.32***
	(5.27)	(4.99)	(2.48)	(5.09)	(0.7)	(5.02)	(4.58)	(5.19)
N	2,991	2,991	2,991	289	289	289	289	289
R2	0.10	0.10	0.00	0.20	0.28	0.19	0.35	0.13
	Panel C. Cubic Polynomial in Distance to Mita Boundary							
Mita	-16.75***	16.85***	-0.1	13.99***	1.09*	14.59***	17.32***	18.1***
	(5.01)	(4.78)	(2.54)	(4.68)	(0.64)	(4.86)	(4.46)	(5)
N	2,991	2,991	2,991	289	289	289	289	289
R2	0.09	0.09	0.00	0.19	0.29	0.00	0.29	0.13
Mean of outcome for Non-Mita Districts	53.05	30.37	16.59	44.10	4.15	4.88	70.99	55.81

The table reports OLS estimates. Dependent variables in columns (1) to (3) were calculated from the household's answer to the question: To which of the following group or community do you feel more identified to? Regressions in columns (1) to (3) are at the household level with clustered errors at the district level. Dependent variables in Peasant Communities sample are the share of agricultural land used by PC (column 4), the total numbers of PC by district (column 5), the share of people affiliated in PC divided by the total population in the district (column 6), the share of PC were recognized by state (column 7), and the share of PC with a property title (column 8). Regressions in columns (4) to (8) are at the district level with robust standard errors in parentheses. All regressions include geographic controls and boundary segment fixed effects. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1.

Table A.II.6. Effect of Mita on Migration Rate

	Dependent: Migration Rate in 2017									
	Immigration Rate					Emigration Rate				
	All sample	<=17 years old	between [18 - 39]	between [40 - 64]	>=65 years old	All sample	<=17 years old	between [18 - 39]	between [40 - 64]	>=65 years old
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Panel A. Cubic polynomial in latitude and longitude									
Mita	-7.26***	-2.88**	-6.64**	-8.29***	-7.98**	0.39	-0.23	1.56	0.43	1.2
	(2.38)	(1.36)	(2.82)	(2.52)	(3.23)	(2.41)	(1.34)	(3)	(3.26)	(2.77)
N	289	289	289	289	289	289	289	289	289	288
R2	0.41	0.38	0.38	0.36	0.27	0.18	0.26	0.18	0.14	0.11
	Panel B. Cubic Polynomial in Distance to Potosí									
Mita	-4.24***	-2.58**	-1.29	-4.91***	-7.86***	-4.04***	-2.59***	-3.75**	-4.98**	-3.98**
	(1.56)	(1.05)	(1.79)	(1.63)	(1.99)	(1.49)	(0.88)	(1.9)	(1.99)	(1.56)
N	289	289	289	289	289	289	289	289	289	288
R2	0.36	0.32	0.32	0.32	0.26	0.16	0.23	0.15	0.13	0.09
	Panel C. Cubic Polynomial in Distance to Mita Boundary									
Mita	-5.63***	-3.7***	-3.2*	-5.52***	-8.63***	-4.48***	-3.24***	-4.49**	-5.15***	-3.55**
	(1.59)	(1.02)	(1.84)	(1.6)	(1.95)	(1.38)	(0.83)	(1.76)	(1.82)	(1.47)
N	289	289	289	289	289	289	289	289	289	288
R2	0.31	0.28	0.23	0.31	0.24	0.16	0.23	0.16	0.12	0.05
Mean of outcome for non-Mita Districts	45.67	18.27	56.94	52.14	45.85	18.12	10.49	23.94	22.42	14.91

The table reports OLS estimates. Observations are at the district level. Robust Standard errors in parentheses. Dependent variable in Immigration Rate is the percentage of the population residing in the origin district but born in another district divided by population in the district. Similarly, Emigration Rate is the percentage of the population born in the district but living outside divided by population born there. All regressions include geographic controls and boundary segment fixed effects. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1.

Table A.II.7. Effect of Mita on Beliefs about the Causes of Economic Development

	Do you think is an obstacle to the development of the country?						
Dependent:	Says "I don't know" to all options	Says "IDK" to at least one option	Colonial History	Foreign Inter-vention	Bad Govern-ment	People's attitude	Scarcity of Natural Resources
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Panel A. Cubic polynomial in latitude and longitude						
Mita	23.81***	19.91***	38.15***	12.6	10.64*	10.15	7.85
	(6.83)	(7.39)	(9.22)	(10.35)	(6.35)	(8.07)	(8.27)
N	1,446	1,446	816	861	1,036	932	1,014
R2	0.15	0.08	0.05	0.04	0.10	0.02	0.03
	Panel B. Cubic Polynomial in Distance to Potosí						
Mita	21.16***	16.21***	11.84	7.54	4.97	-1.05	5.01
	(5.01)	(5.44)	(7.79)	(6.63)	(4.95)	(6.46)	(6.27)
N	1,446	1,446	816	861	1,036	932	1,014
R2	0.15	0.08	0.02	0.03	0.07	0.01	0.03
	Panel C. Cubic Polynomial in Distance to Mita Boundary						
Mita	24.7***	20.29***	10.53	5.43	3.39	-2.78	1.67
	(5.11)	(5.34)	(7.55)	(5.68)	(5.4)	(6.56)	(5.86)
N	1,446	1,446	816	861	1,036	932	1,014
R2	0.14	0.07	0.01	0.04	0.06	0.00	0.04
Mean of outcome for Non-Mita Districts	14.88	39.45	48.13	50.75	81.56	64.45	45.96

The dependent variable were computed from respondent's answer to the question: Do you think is an obstacle to the development of the country? The categories for the respondent's answer are: "Colonial History", "foreign intervention", "bad government", "people's attitude", and "scarcity of Natural Resources". Observations are at the household level with standard errors clustered at the district level in parentheses. For all regressions there are 93 clusters. All regressions include districts within 100 km of the Mita boundary and include geographic controls and boundary segment fixed effects. Coefficients that are significantly different from zero are denoted by: *** p< 0.01, ** p<0.05, *p<0.1.