# Supplementary Materials: Extraction, Assimilation, Accommodation

## Contents

# S1 Ethical considerations of interview research

As part of the broader project of which this paper is a part, I conducted semi-structured interviews with over fifty Peruvian mayors and Indigenous community presidents. Because this research was conducted with elected authorities, it was reviewed by human subjects at UC Berkeley and deemed exempt from further review "as it satisfies the Federal and/or [university] requirements under category(ies) 2,3" (IRB Protocol 2016-09-9126).

Every effort was taken to ensure that the highest ethical standards were maintained. Before beginning the interviews, the purpose of the research was explained—i.e., to understand dynamics of governance in Peru's Indigenous communities—and verbal consent was obtained. Recordings were taken only with the consent of the community president or mayor. Upon completion of fieldwork, recorded interviews were transcribed, identifying information was removed, and the recordings were destroyed to preserve anonymity. The research adheres to the 2020 APSA Principles and Guidance document submitted by the Ad Hoc Committee on Human Subjects Research.

# S2 Data and coding

This section outlines the coding of the main independent and dependent variables used in this study. I also detail the main data sources used in the analyses. In the Dataverse Appendix, I address potential issues that may arise with these data sources.

## S2.1 Calculation of running variable

Data collection on the running and treatment variables involved an extensive review of primary and secondary sources. To calculate the distance to borders dividing treatment from control provinces, I first reconstructed the map of provincial borders in 1920. I used evidence from Kubler (1952), as well as an analysis of government laws mandating the creation of new provinces. I define a study group as all provinces located in Peru's mountainous Andean region. Alberto Regal's *Los Caminos del Inca*, which compiles information from sixteenth-century travel documents, provided information on the location of the Qhapaq Ñan (Regal 1936). Based on my archival research, this was the source that reflects best what Leguía thought to be the location of the Inca road in the 1920s. I use this information to code provinces in the Andes as containing a portion of the Inca road or not. I also collected data on Leguía-era road construction from sources published at the end of Leguía's term.[S1]

I then use a straight-line distance measure to determine how far each municipality (the lowest level of administration in Peru) is from a border dividing a treatment from a control province.[S2] I calculated distances of municipalities to provincial borders using a variety of official, government-issued maps from the period. All communities can be

[S1]The main source was Ministerio de Fomento (1930), a government source that documented the kilometers of road planned and constructed in each province under Leguía. I further cross-checked the data in this volume with two non-government sources: Díez Canseco and Aguilar Revoredo (1929) and Portaro (1930).

[S2]Appendix Figures S14 and S15 show the robustness of the main findings to the use of an alternative coding of the running variable, which takes into account local altitude;

considered cluster assigned to their distance from a treat-control border. Communities inside a control province are given negative value on the running variable (in km), and those inside a treated province are given a positive value (in km).

### S2.2 Data on conscripted workers

To my knowledge, no systematic data exists at any level—national or subnational—on road conscription in Peru. Partial sources exist. These include Araujo Antonio (1991); Dirección de Vías de Comunicación (1928); Peru Dirección Nacional de Estadistica y Censos (1944). In some provinces, almost all male community members were forced to work, regardless of age. In the province of Lima, 44,800 workers were conscripted in just the first half of 1928 (Dirección de Vías de Comunicación 1928, 217); the 1940 census calculates that there were just over 67,000 Indigenous males in the entire province. In the province of Pallasca, about half of the Indigenous male population in 1940 (5,514 people) worked on a single project in 1928, and a much larger percentage (5,392) were included in the conscription rolls (Dirección de Vías de Comunicación 1928, 100). At this point, it is important to note that not all communities worked on every project; in the first half of 1928, for example, communities in a few districts in Pallasca sent more than two-thirds of their conscripts to work (Cabana, Tauca, and Llapo) while others sent fewer than 30 percent of their conscripts (Yupán and Cajamala).[S3] However, there is no evidence that these differences were correlated across time; in other words, even if a community avoided conscription in one period, there is no evidence that it also avoided it in future periods. For road conscription in Bolivia, slightly more comprehensive data is available at a lower level of analysis Ministro del Ramo (1908); Prefecto de Cochabamba (1915); Prefecto de Oruro (1911); Prefecto de Potosí (1916).

### S2.3 The 2012 Agrarian Census

For all but one of the dependent variables, I draw on evidence from a 2012 census of Agrarian communities. The census covered over 70 percent of Indigenous-peasant communities. There is one response from each community; the community leader is responsible for responding. Generally, there was a close correspondence between the responses to the community census and a survey I conducted of Indigenous community leaders in Cusco, Peru in 2017.

### S2.4 DV: Community recognition and communal land titles

Each community leader was asked in the census if her community is registered with the central government. Community registration is an important Indigenous right in and of itself, as it entails governments recognizing the basic unit of Indigenous social, economic, and political organization: the community. This variable is thus coded as 0 or 1, where 0 indicates no recognition and 1 indicates recognition.

Community leaders were also asked if they have a completed title to their communal land. Some communities have incomplete titles because of administrative delays or their failure to produce the required documentation. During my fieldwork, I learned that

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distances traversed at higher altitudes are weighted more highly than those traversed at lower altitudes.

[S3]See Dirección de Vías de Comunicación (1928, 99).

the best predictor of having a completed title is community effort. In other words, communities can achieve a communal title if they can produce the needed documentation and pressure the government to recognize their communal land. Thus, a completed title provides a measure of accommodation. I use the question around having a completed title and code communities that have a completed title as 1 and all others as 0.

### S2.5 DV: Indigenous institutions index

The census also asks about a number of Indigenous institutions. Using the available questions and information I learned during interviews and through an original survey, I construct an index of a series of yes/no questions that community leaders were asked (Table S2). A first question asks whether traditional leaders remain in power in Indigenous communities. This is an important measure of the persistence of Indigenous political institutions. A second question asks whether members of the community council comply with their requirements to provide unpaid services to the community. This can require organizing and funding festivals for the community or serving as justice of the peace. This *cargo* system is common throughout Indigenous communities in Latin America. I then examine two questions around economic institutions: whether community members participate in communal work and whether there is communal farming. These are Indigenous institutions traditionally associated with subsistence agriculture and the moral—as opposed to market—economy (Scott 1977).

I then analyze a series of questions around social institutions, namely *ayni*, *minka*, and *mita*. While these terms are sometimes used interchangeably, they, in fact, have distinct meanings. Ayni involves the reciprocal exchange of labor between members of a community. For example, if one community member cannot harvest his crops because of illness, others in the community will come to help him, with the expectation that that assistance will be repaid in kind, if needed, at a later date. While ayni involves reciprocity among individual community members, minka and mita both involve community member obligations to the broader community. Minka often entails short-term work to build or repair infrastructure, such as roads, community centers, or schools—within the community. Mita involves unpaid labor that is provided for public works projects, often outside of the community. I sum the dummy variable values for each item to construct an index that can take on values from 0 to 7. An Item Response Theory (IRT) model of the index suggests a high correlation among the index components. The standardized root mean square residual (SRMSR) is 0.025, far less than the conventional benchmark of 0.08.

Figure S2 highlights variation in Indigenous accommodation and assimilation using the institutional measure. For illustration, I code values above the median (4 items) as accommodation and values below the median as assimilation. Consistent with the measure in hte main text, there is stronger evidence of accommodation in southern Peru. Assimilation is most common in the north, while central Peru offers a mix of assimilation and accommodation.

### S2.6 DV: Bilingualism

For this outcome, I use a measure that asks leaders which languages are spoken in their communities. If Indigenous leaders report only using Spanish, they are coded as monolingual Spanish. If Indigenous leaders report using Spanish and at least one Indigenous language, their community is coded as bilingual. And if leaders report using

only an Indigenous language, their community is coded as monolingual Indigenous. This latter category indicates an outcome of de facto autonomy or marginalization (Table A1). Thus, the main outcome measure here is a dummy variable, coded as 1 if communities are reported as bilingual and 0 if they are reported to be monolingual Spanish or monolingual Indigenous. As with the previous measures, Figure S1 suggests more accommodation—measured by the extent of bilingualism—in the south of Peru. Thus, the institutional and linguistic measures of accommodation correlate highly with one another, and a formal analysis confirms this ($F$=55). Historical evidence suggests relative stability in bilingualism. 17 percent of Peruvians were bilingual in Spanish and an Indigenous language in 1940; 18 percent were in 1961; and 16 percent were in 1981 (Klee 2009, 133). This suggests that bilingualism may not be a transitional category—between monolingual Indigenous and monolingual Spanish—but an enduring outcome. Similar stability has been observed in Bolivia where the portion of bilingual citizens was 42.5% in 1976, 45.7% in 1992, and 40.2% in 2001 (Cusicanqui 2007, 116).

### S2.7 Mechanism: Indigenous-peasant movements (1920-1930)

For the community collective mobilization outcome, I have compiled data from several primary and secondary sources. For the main outcome presented in the paper, I use data from the Boletínes de Asuntos Indígenas, which include around five hundred Indigenous denunciations and movements that occurred between 1922 and 1930. I focus on Indigenous movements explicitly targeted at the road conscription law or abuses by local authorities; I do not include either denouncements by individuals or movements against large landowners. I supplement this analysis with data from secondary sources: Kammann (1982), Kapsoli and Reátegui (1987), and Kapsoli (1982). Kammann (1982) draws primarily on media and secondary sources for a subset of departments in the southern Andean region, documents 104 Indigenous-peasant movements between the late 1800s and 1964; I focus on those against local authorities that occurred between 1920 and 1930. Kapsoli and Reátegui (1987) document hundreds of complaints filed in the Actas de la Patronato de la Raza Indígena by Indigenous communities between 1922 and 1930; I focus on those that concerned abuses by local authorities. I also include in the analysis a small number of movements documented as case studies in (Kapsoli 1982, 68-79).

Many movements occurred within municipalities, and thus, data is coded at that level. However, some movements occurred at the provincial level. In those cases, I code all municipalities within a province as having experienced an Indigenous movement, as more fine-grained data—which would allow for coding at the municipal level—is unavailable, and it is likely that many communities within the province were in fact part of the movement.

## S3 Typology of extraction

The arrival of Spanish colonialism increased the exposure of Indigenous communities to various forms of extraction—which can be defined as any effort by rural elites or the central state to appropriate Indigenous labor and natural and financial wealth on a temporary or permanent basis.[S4] Extraction, however, was not brought to the Americas by the Spanish. The Inca empire required subjects to pay tribute and provide unpaid labor on public and private works. The colonial-era *mita*, through which the Spanish mobilized Indigenous labor to work without pay in mines, was in fact a pre-colonial institution; *mit'a* is a Quechua word that was used to indicate voluntary service contributions to the Inca empire. The existence of these pre-colonial institutions undoubtedly facilitated later extractive efforts by the Spanish and post-independence governments, which used the language and norms around these institutions to justify their more coercive labor practices.

Extractive efforts by colonial and post-independence regimes in Latin America can be categorized within a two-dimensional theoretical space. The first dimension considers the degree to which extraction disrupts Indigenous communities. In other words, how harmful are these institutions to Indigenous communities' short- and long-term welfare? Scholars have often regarded head taxes and tribute as relatively less harmful forms of extraction. Contributions of money, livestock, and agricultural produce generally were less invasive, did not remove individuals from communities, and ultimately were the justification through which communities were able to preserve their communal land. The establishment of "tributary pacts" during the colonial period granted communities autonomy and certain land rights in exchange for continued payment (Platt 1982). In Peru, the elimination of tribute as met with protests; one Indigenous petition from the department of Ancash stated, "That is how things remained until the year 1855, when tribute was abolished and they made us understand that those rights, or to put it better, the community which we had enjoyed for several centuries...*had been correlative to the tribute* [emphasis in original] and that it being abolished, so also was [our community] abolished" (Thurner 1997, 113). In 1858, communities in Ecuador "rose up violently and demanded the return of the tribute system" (O'Connor 2007, 49).

Labor coercion, by contrast, had negative effects and often did not provide any reciprocal benefit. Coercive labor practices involved central states and rural elites removing individuals from their communities for extended periods of time, forcing them to engage in back-breaking labor. Systematic analyses of these forms of extraction suggest they had enduring, negative consequences for the economic welfare and human capital of affected communities (Dell 2010). Debt peonage was particularly disruptive. State efforts to conscript Indigenous labor were often short-term with conscripts working two-to-four weeks a year: most Indigenous workers ultimately returned to their communities upon completing their service. Rural elite extraction was more permanent. Landowners preserved the most productive land for themselves. Efforts were made to atomize community members by assigning them small plots that had corresponding debt obligations. Those who failed to provide sufficient labor for the landowner were kicked off the land. This resulted in the dissolution and division of many Indigenous communities.

In addition to variation in the extent of disruption, extractive practices also varied in the degree to which they coopted Indigenous elites. Indigenous leaders, or *caciques*, mobilized labor for state officials and rural elites during the colonial period (Dell 2010; Albiez-

[S4]The material in this section is developed further in my book project.

Wieck 2022, 93). These leaders were also assigned responsibility for tribute collection, serving as one-half of the aforementioned "tributary pacts" (Platt 1982). Community leaders sometimes served as administrators and foremen on large estates, maintaining order among community members in exchange for better access to land or less time working on the hacienda demesne.[S5]

State dependence on Indigenous leaders to aid in extraction generally decreased after colonialism. In the realm of tribute collection, the collaboration between Indigenous elites (*kurakas*) and the Spanish Crown mostly ended after the Tupac Amaru rebellion of 1780-1782, when the colonial government attempted to weaken systematically Indigenous leaders to prevent them from organizing future rebellions (Jacobsen 1993, 96-97). Indigenous leaders, especially in Peru and Ecuador, would play a relatively limited rule in the collection of head taxes both in the late colonial and early post-independence periods (Larson 2004, 106). The reduced dependence on Indigenous leaders also extended to labor conscription, where carrots were fully abandoned in favor of worker mobilization by government bureaucrats. While states sought to expand their authority and capacity in peripheral areas, many rural elites continued to find it more cost-effective to buy the loyalty of Indigenous leaders.[S6]

[S5]See e.g., Mayer (1995, 184); Klein (1993, 148); Jacobsen (1993, 295); Paige (1978, 345).

[S6]That these forms of extraction were more disruptive also incentivized brokering agreements with Indigenous leaders to keep workers from fleeing or rebelling.

## S4 Supplemental Tables and Figures

Table S1. Theorized outcomes of contemporary Indigenous-state relations: **Accommodation** and *Assimilation*

| | | Support | | |
|---|---|---|---|---|
| | | Low | Moderate | High |
| Control | Low | De facto autonomy | **Decentralized autonomy** | **Subsidized autonomy** |
| | Medium | Marginalization | **Bounded autonomy** | *Integration* |
| | High | Displacement | *Corporatism* | *Paternalism* |

Table S2. Components of index of Indigenous institutions

| Type of institution | Question in 2012 Cenagro census |
|---|---|
| *Political* | 1) Are there traditional authorities in power?<br>2) Do the members of the community council comply with the cargo system (unpaid, temporary service in community posts)? |
| *Economic* | 3) Do community members participate in communal work?<br>4) Is there communal farming? |
| *Social* | 5) Do community members preserve ayni?<br>6) Do community members preserve minka?<br>7) Do community members preserve mita? |

Table S3. Measures for outcome and near-term mechanism

| | Hypotheses | Measure | Source |
|---|---|---|---|
| | *Labor conscription increases:* | | |
| Main effect | 1) Accommodation (omnibus) | -Dummy measure of complete title to communal land<br><br>-Dummy measure of community registration with government<br><br>-Dummy measure of bilingualism (2012)<br><br>-7-item index of Indigenous institutions (2012) | 2012 census of Indigenous/peasant communities |
| Mechanism | 2) communities' collective action capacity | -Municipality had an Indigenous movement (1920-1930) | Kapsoli (1982), Kapsoli & Reátegui (1987), Kammann (1982), Boletín de Asuntos Indígenas (1922-1930) |

Table S4. Typology of extraction

| | | Degree of Indigenous elite cooptation: Lower | Degree of Indigenous elite cooptation: Higher |
|---|---|---|---|
| Extent of disruption: Lower | | **State-imposed head taxes (post-independence)**<br>Examples: Indigenous head tax | **State-imposed head taxes (colonial)**<br>Examples: Indian tribute |
| Extent of disruption: Higher | | **State-led labor extraction (post-independence)**<br>Examples: Road conscription, military conscription | **Rural-elite extraction**<br>Examples: Expansion of large estates & debt peonage; colonial-era encomienda system<br><br>**State-led labor extraction (colonial)**<br>Examples: Mita |

Table S5. Regression of Leguía road on Qhapaq Ñan province (total and finished)

| | *Dependent variable:* | |
|---|---|---|
| | KM of road (planned and built) | KM of road (built) |
| | (1) | (2) |
| Qhapaq Ñan province | 162,761.900*** | 91,905.230*** |
| | (46,613.040) | (22,960.120) |
| Constant | 205,800.000*** | 48,980.490*** |
| | (32,896.060) | (12,122.700) |
| Observations | 83 | 83 |
| F Statistic (df = 1; 81) | 12.188*** | 15.849*** |

*Note:* *p<0.1; **p<0.05; ***p<0.01. Data coded at provincial level. Qhapaq Ñan provinces are those located along the primary highland route of the road, and non-QN provinces are those in the highland that do not contain a portion of the main QN route. Data collected from Regal (1936); Ministerio de Fomento (1930); Díez Canseco and Aguilar Revoredo (1929); Peru (1929); Portaro (1930).

Table S6. Test of differences in altitude of provincial capital: QN provinces vs non-QN provinces

| | *Dependent variable:* |
|---|---|
| | Altitude (m) |
| Qhapaq Ñan province | 50.58 |
| | (161.19) |
| Constant | 2,951.51*** |
| | (114.67) |
| Observations | 83 |
| F Statistic | 0.098 (df = 1; 81) |

*Note:* *p<0.1; **p<0.05; ***p<0.01. See Table S5 for specification and sources. Additional data from Ministerio de Hacienda y Comercio (1956).

Table S7. ITT Estimates: Main outcome and mechanism (CER bandwidth)

| | *Dependent variable:* | |
|---|---|---|
| | Omnibus accommodation | Movements |
| | (1) | (2) |
| QN province | 0.285*** | 0.286*** |
| | (0.043) | (0.105) |
| BW (CER) | 24 | 34 |
| N | 2583 | 607 |

*Note:* *p<0.1; **p<0.05; ***p<0.01. Estimates taken from a local linear regression-discontinuity analysis. The running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one. SEs clustered at province level. Coverage error rate bandwidth. Data taken from Instituto Nacional de Estadística e Informática (2014); Kammann (1982); Kapsoli (1982).

Table S8. ITT Estimates: Main outcome and mechanism (MSE bandwidth)

| | *Dependent variable:* | |
|---|---|---|
| | Omnibus accommodation | Movements |
| | (1) | (2) |
| QN Province | 0.307*** | 0.304*** |
| | (0.043) | (0.103) |
| BW (MSE) | 29 | 43 |
| N | 2583 | 607 |

*Note:* *p<0.1; **p<0.05; ***p<0.01. Estimates taken from a local linear regression-discontinuity analysis. The running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one. SEs clustered at province level. Mean-squared error bandwidth. Data taken from Instituto Nacional de Estadística e Informática (2014); Kammann (1982); Kapsoli (1982).

Table S9. CACE Estimates: Effect of Leguía road (100000 km, instrumented) on main outcome and mechanism

| | *Dependent variable:* | | | |
|---|---|---|---|---|
| | Omnibus accommodation | | Movement | |
| | (1) | (2) | (3) | (4) |
| Leguía road | 0.118*** | 0.142*** | 0.160 | 0.186* |
| | (0.028) | (0.030) | (0.102) | (0.111) |
| BW selector | CER | MSE | CER | MSE |
| BW | 24 | 30 | 28 | 34 |
| N | 2570 | 2570 | 606 | 606 |

*Note:* *p<0.1; **p<0.05; ***p<0.01. Estimates taken from a local linear regression-discontinuity analysis. The running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one. SEs clustered at province level. Coverage error rate (CER) and mean-squared error (MSE) bandwidth used. Instrument is KM of road built and planned under Leguía. Data taken from Instituto Nacional de Estadística e Informática (2014); Kammann (1982); Kapsoli (1982).

Table S10. ITT Estimates: Individual accommodation measures (CER bandwidth)

| | *Dependent variable:* | | | |
|---|---|---|---|---|
| | Communal title | Community recognized | Institutions | Language |
| | (1) | (2) | (3) | (4) |
| QN province | 0.117*** | 0.094*** | 0.337*** | 0.036 |
| | (0.024) | (0.020) | (0.057) | (0.067) |
| BW (CER) | 22 | 25 | 20 | 22 |
| N | 2583 | 2778 | 2778 | 2778 |

*Note:* *p<0.1; **p<0.05; ***p<0.01. Estimates taken from a local linear regression-discontinuity analysis. The running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one. SEs clustered at province level. Coverage error rate bandwidth. Data taken from Instituto Nacional de Estadística e Informática (2014).

Table S11. ITT Estimates: Individual accommodation measures (MSE bandwidth)

| | *Dependent variable:* | | | |
|---|---|---|---|---|
| | Communal title | Community recognized | Institutions | Language |
| | (1) | (2) | (3) | (4) |
| QN province | 0.123*** | 0.091*** | 0.287*** | 0.041 |
| | (0.024) | (0.017) | (0.065) | (0.064) |
| BW (MSE) | 28 | 31 | 24 | 27 |
| N | 2583 | 2778 | 2778 | 2778 |

*Note:* *p<0.1; **p<0.05; ***p<0.01. Estimates taken from a local linear regression-discontinuity analysis. The running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one. SEs clustered at province level. Mean-squared error bandwidth. Data taken from Instituto Nacional de Estadística e Informática (2014).

Table S12. CACE Estimates: Leguía road (100000 of km, instrumented) and accommodation

| | *Dependent variable:* | | | |
|---|---|---|---|---|
| | Communal title | Community recognized | Institutions | Language |
| | (1) | (2) | (3) | (4) |
| Leguía road | 0.047*** | 0.038*** | 0.121*** | 0.014 |
| | (0.011) | (0.008) | (0.032) | (0.027) |
| BW (CER) | 22 | 22 | 22 | 22 |
| N | 2570 | 2764 | 2764 | 2764 |

*p<0.1; **p<0.05; ***p<0.01. See Tables S9 and S10 for specification.

Table S13. Exposure to labor conscription (road built under Leguía) and land invasions

| Department | KM of road built (1920-1930) | Highest rate of land invasion (1963-1964) |
|---|---|---|
| Amazonas | 24,500 | No |
| Tacna | 1,157,000 | No |
| Arequipa | 2,801,000 | No |
| Piura | 3,841,500 | No |
| La Libertad | 4,016,400 | No |
| Lima | 4,670,100 | No |
| Huanuco | 4,976,000 | No |
| Apurimac | 6,327,400 | No |
| Cajamarca | 7,107,300 | Yes |
| Pasco | 8,425,000 | Yes |
| Ancash | 13,544,500 | Yes |
| Ayacucho | 32,046,100 | Yes |
| Huancavelica | 33,629,000 | No |
| Cusco | 40,129,000 | Yes |
| Junin | 43,947,700 | Yes |
| Puno | 211,005,500 | No |

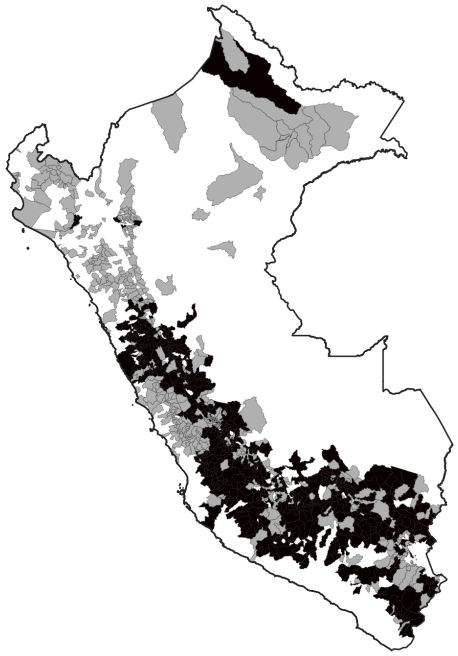
*Note:* Land invasion data taken from the departments that Díaz Martínez (2016) notes as having particularly high levels of land invasions between 1963 and 1964 when "between 500 and 600,000 peasants—initiated massive invasions of lands that were taken from them in recent centuries" (420).
*Sources*: Ministerio de Fomento (1930) and Díaz Martínez (2016, 420).

Table S14. Robustness check: Cross-regional variation

| | *Dependent variable:* *Omnibus Accommodation measure* | |
|---|---|---|
| | (1) | (2) |
| QN province | 0.289*** | 0.293*** |
| | (0.040) | (0.098) |
| BW (CER) | 24 | 32 |
| N | 2583 | 607 |
| Regional fixed effects | Yes | Yes |

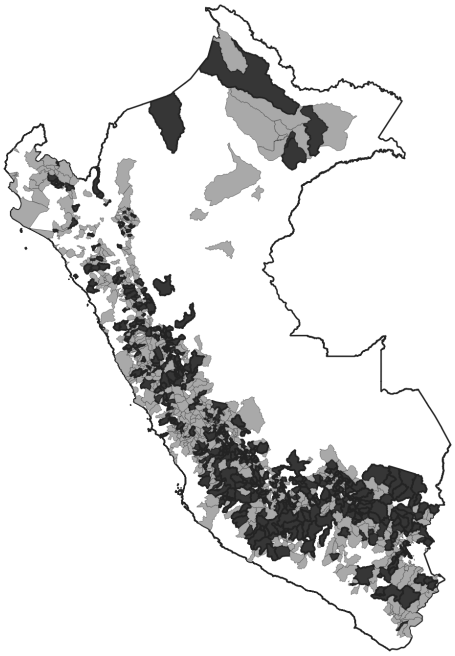
*Note:* *p<0.1; **p<0.05; ***p<0.01. See Table S8 for specification. Regional fixed effects include three regions of the Andes: South, North, and Central.

Figure S1. Indigenous-state relations in Peru as measured by extent of bilingualism



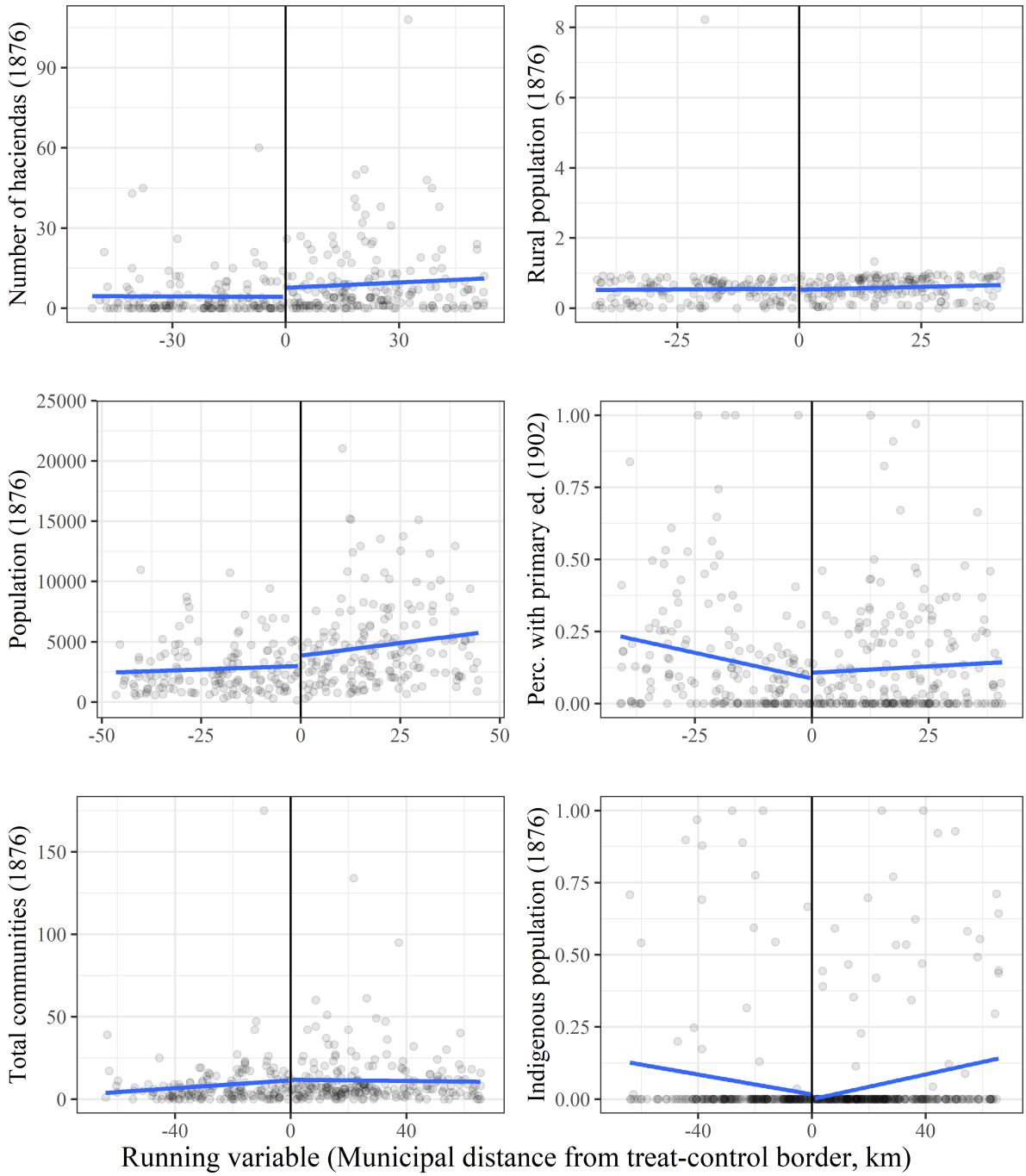
*Note:* Municipalities coded based on whether the majority of communities in the municipality are bilingual. Municipalities that are more darkly shaded indicate more bilingualism. Gray municipalities are more likely to speak only Spanish or an Indigenous language. The latter is more common in the south, and the former more common in central and northern Peru.
*Source*: Instituto Nacional de Estadística e Informática (2014).

Figure S2. Indigenous-state relations in Peru as measured by index of Indigenous institutions



*Note:* Municipalities coded as accommodation if they score above the country-wide median (4) on the seven-item index. Darker municipalities score above the median (accommodation) while gray municipalities score below the median (assimilation).
*Source*: Instituto Nacional de Estadística e Informática (2014).

Figure S3. Test of balance on available pre-treatment covariates




*Note*: Data taken from 1876 National Population Census and 1901 Census of Schools. None of the above tests are significant at $p < 0.1$. The data has been binned, and shading of points indicates the density of observations at each value of the running variable.

Figure S4. Test of sorting around cutpoint ($p = 0.2$)

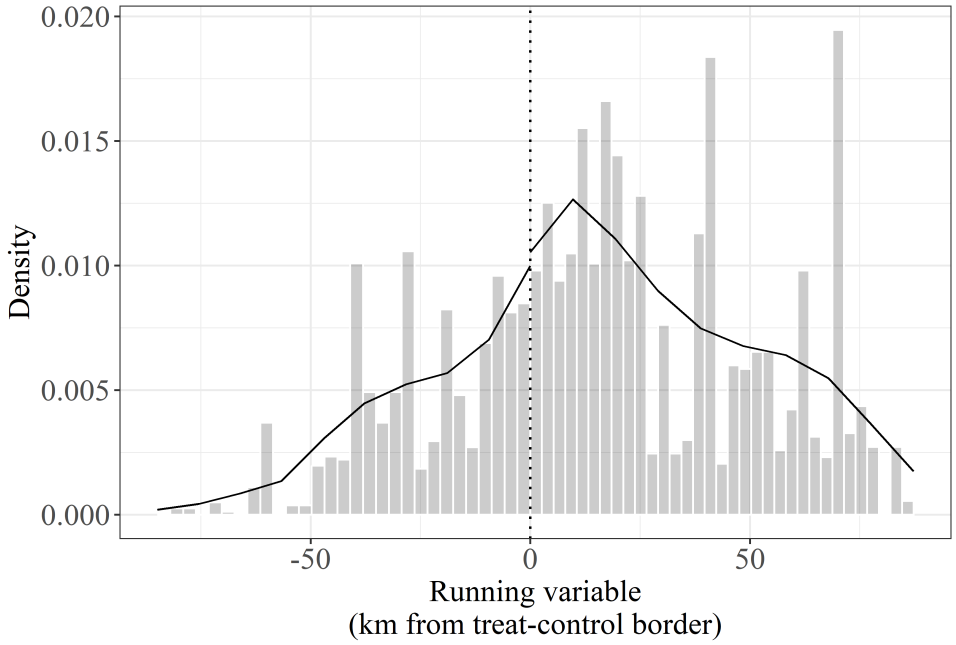
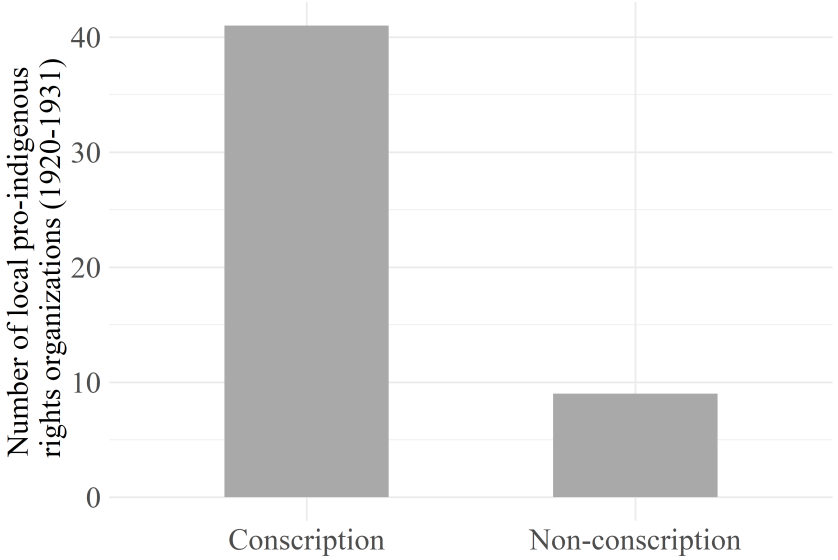


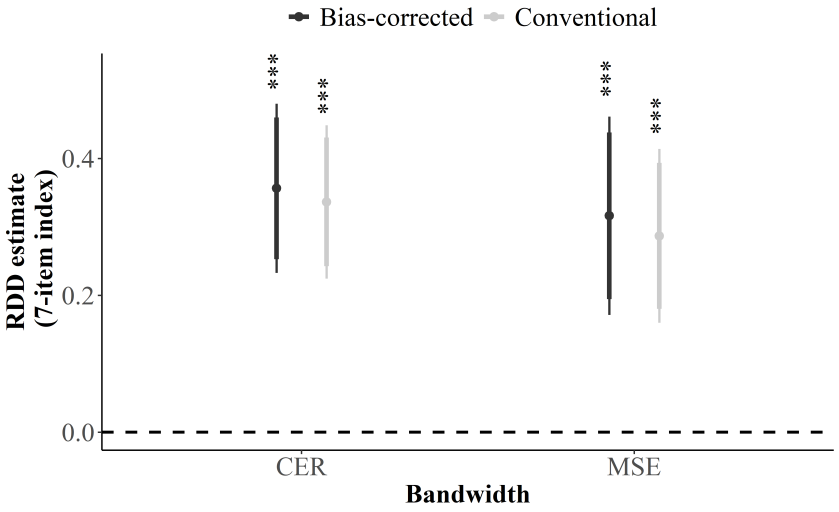

Figure S5. Location of sub-committees of Tahuantinsuyo in conscription and non-conscription provinces



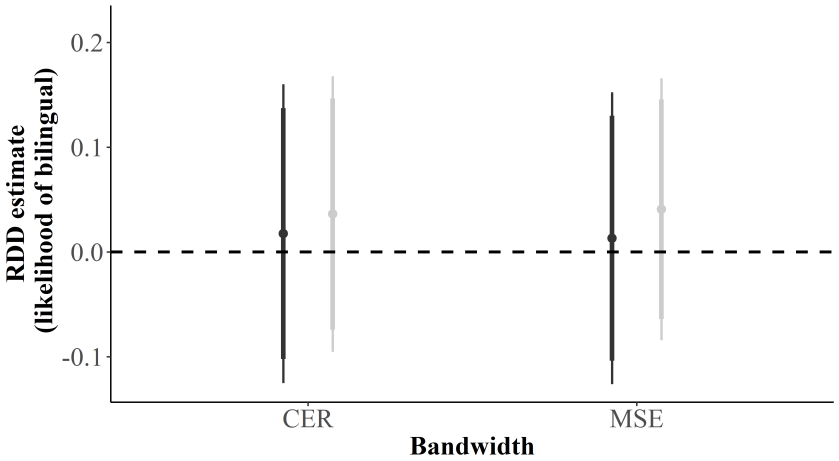

*Note:* *p<0.1; **p<0.05; ***p<0.01. Author analysis based on data from Melgar Bao (1988). Conscription eligibility determined by location of Qhapaq Ñan.

Figure S6. The effect of labor conscription on institutional/cultural measures of accommodation

(a) Institutions index



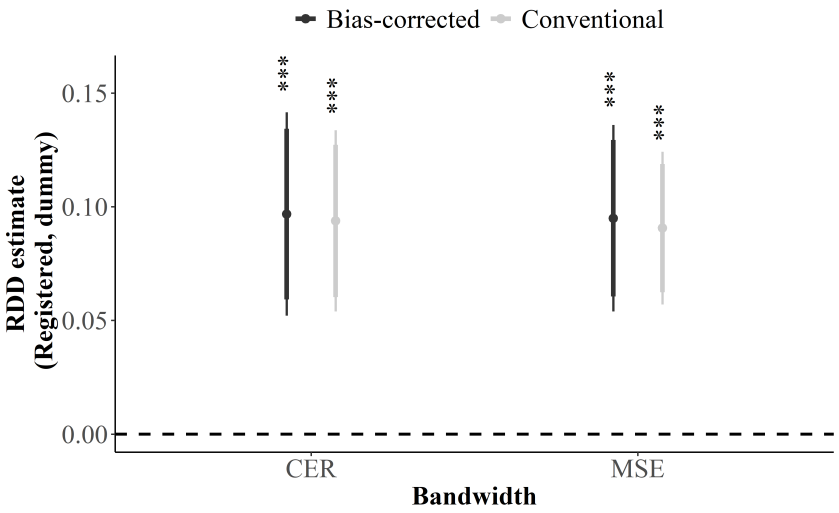

(b) Linguistic measure



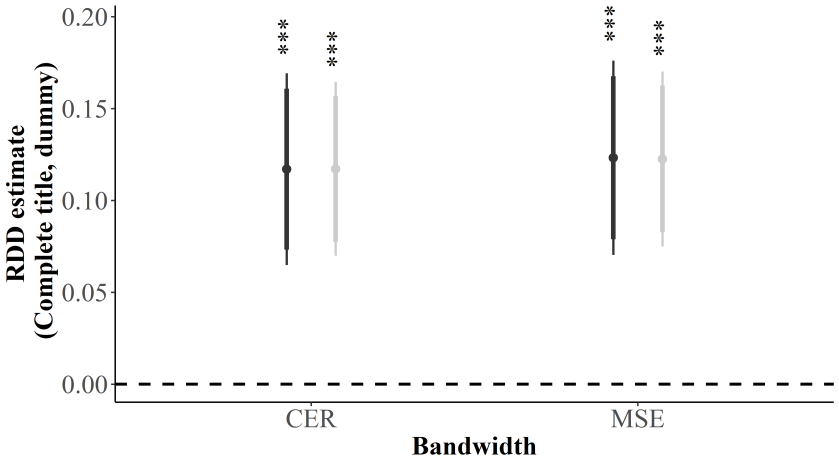

*Note:* *p<0.1; **p<0.05; ***p<0.01. Point estimates taken from a local-linear regression-discontinuity analysis. 90 and 95 percent confidence intervals plotted. Dependent variables are listed in Table S3. Running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one. SEs clustered at province level. P-values adjusted for multiple comparisons using a Benjamini Hochberg procedure (4 outcome variables). Bias-corrected estimates include robust confidence intervals. Tables S10 and S11 contain further information. N=2,778. Source: INEI (2014).

Figure S7. The effect of labor conscription on legal measures of accommodation

(a) Community registered with government

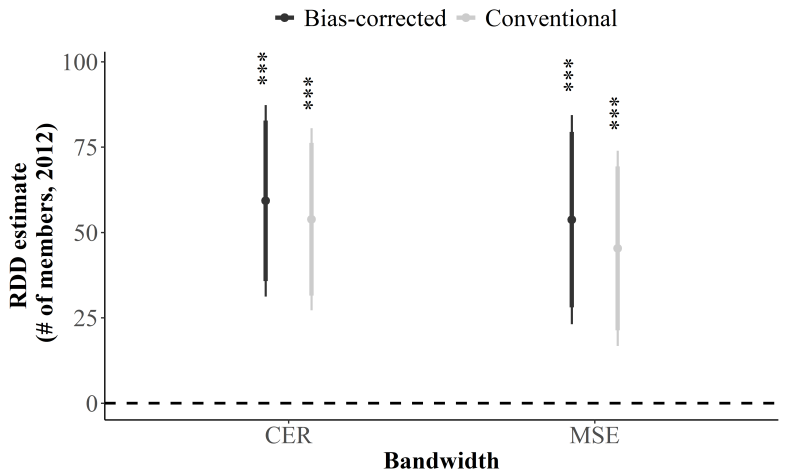



(b) Completed title to communal land



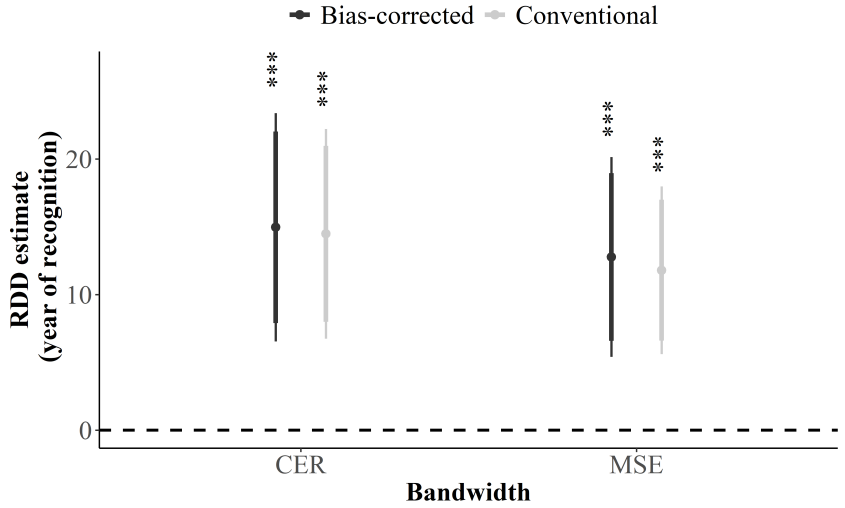

*Note:* *p<0.1; **p<0.05; ***p<0.01. Dependent variables are listed in Table S3. See Figure S6 for specification and sources. Tables S10 and S11 contain further information. N=2,583 (title), 2,778 (recognition).

Figure S8. Effect of labor conscription on community size (2012)



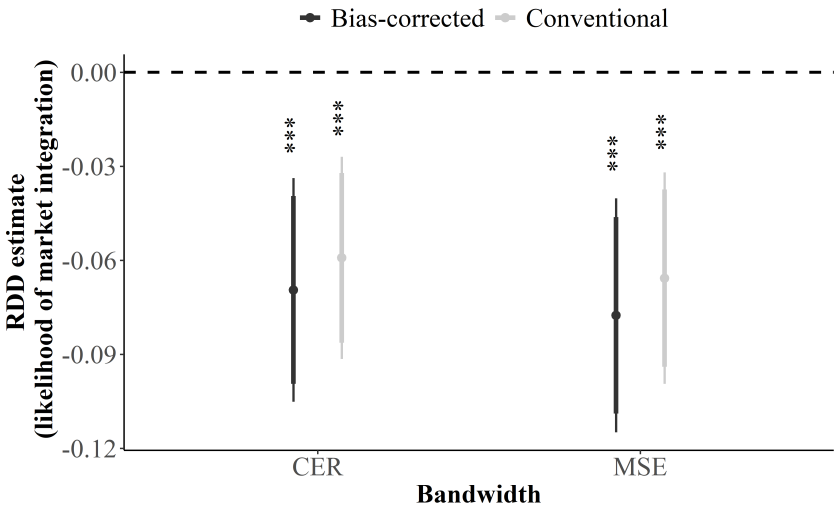

*Note:* *p<0.1; **p<0.05; ***p<0.01. Point estimates taken from a local-linear regression-discontinuity analysis where the dependent variable is the number of registered community members. 90 and 95 percent confidence intervals plotted. The running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one. SEs clustered at province level. Data taken from Instituto Nacional de Estadística e Informática (2014). Table D2 contains further information. Bias-corrected estimates include robust confidence intervals. $N = 2,778$.

Figure S9. Effect of labor conscription on year of recognition: RDD



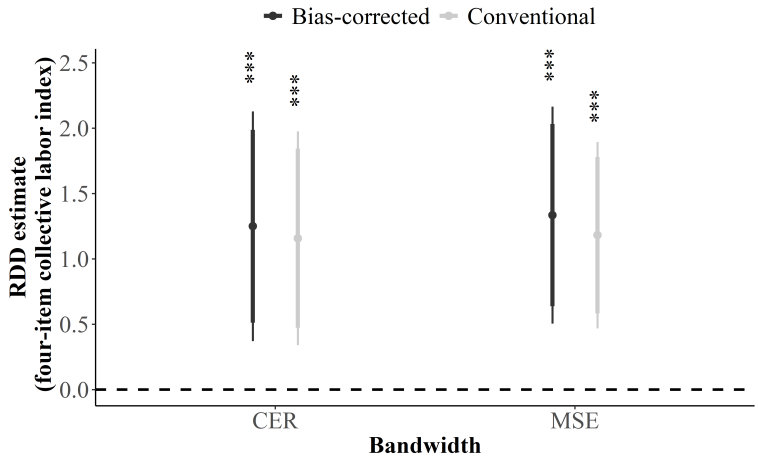

*Note:* *p<0.1; **p<0.05; ***p<0.01. Point estimates taken from a local-linear regression-discontinuity analysis where the dependent variable is a community's year of recognition (min. 1921, max. 2008). The running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one. SEs clustered at province level. Data taken from Instituto Nacional de Estadística e Informática (2014); Ministerio de Vivienda, Construccion, y Saneamiento (2009). Table D2 contains further information. Bias-corrected estimates include robust confidence intervals. $N = 2,332$.

Figure S10. Effect of labor conscription on market integration: RDD



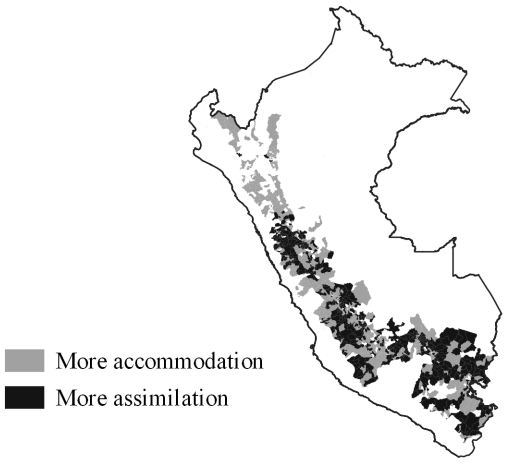

*Note:* *p<0.1; **p<0.05; ***p<0.01. Point estimates taken from a local-linear regression-discontinuity analysis. 90 and 95 percent confidence intervals plotted. The dependent variable is a dummy variable that captures whether communities engage in "productive or business activities:" agriculture, livestock, agricultural machinery, agrobusiness, marketing, mining, forestry, or tourism. The running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one. SEs clustered at province level. Data taken from Instituto Nacional de Estadística e Informática (2014). Table D3 contains further information. Bias-corrected estimates include robust confidence intervals. $N = 2,778$.

Figure S11. Effect of labor conscription on traditional institutions, 1962



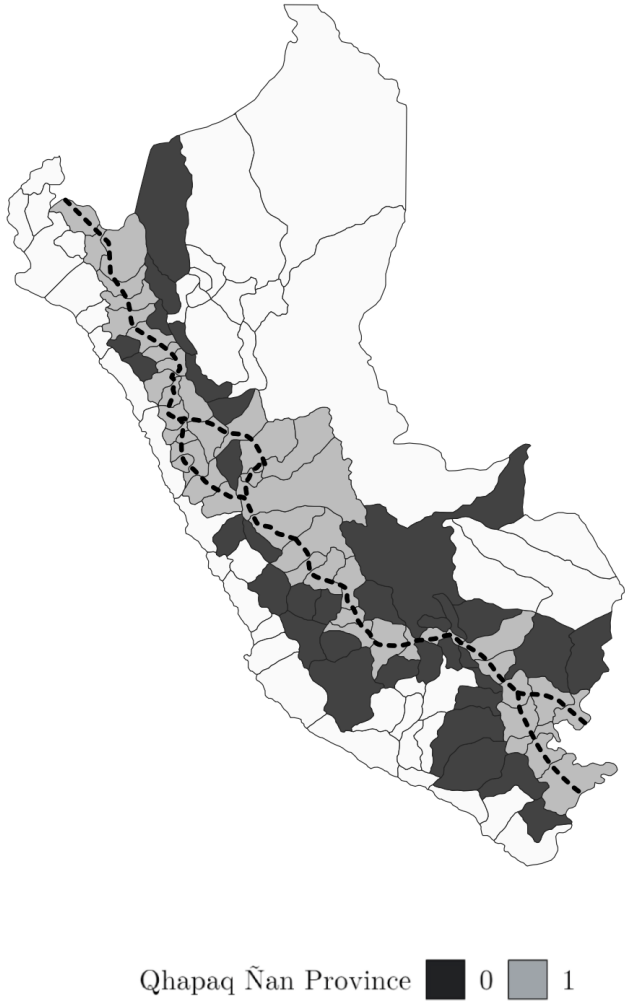

*Note:* *p<0.1; **p<0.05; ***p<0.01. Point estimates taken from a local-linear regression-discontinuity analysis. The dependent variable is the number of public works projects (four total) for which the community used unpaid collective labor in the previous year (survey taken in 1962), including schools, irrigation canals, roads, and bridges. The running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one. Data taken from Dobyns (1964). Table D3 contains further information. $N = 254$.

Figure S12. Indigenous-state relations in Peru using omnibus measure (study group, only)



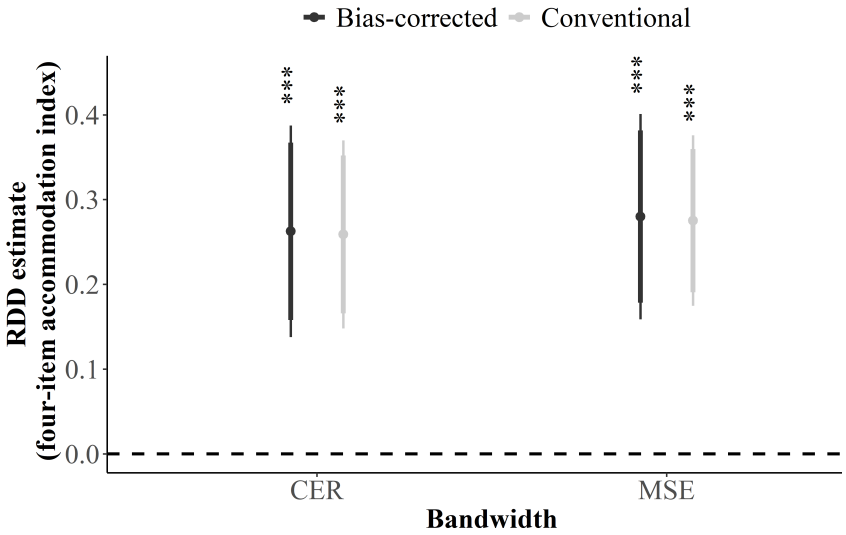

*Note:* Community scores on an omnibus measure of accommodation and assimilation, aggregated to the municipal level. Municipalities are coded based on whether communities in that municipality are—on average—below/above average omnibus score for all communities (2.731). The omnibus measure of accommodation considers whether a community 1) maintains Indigenous institutions, 2) is bilingual, 3) has recognition, and 4) has a completed communal land title.
*Source:* Instituto Nacional de Estadística e Informática (2014).

Figure S13. Qhapaq Ñan Provinces Study Group (1940 borders) with Qhapaq Ñan (dashed line)




*Note:* The map depicts the central sierra route of the Qhapaq Ñan along with adjacent "control" provinces in the mountainous sierra. White provinces are not included in the study group. Dashed line indicates Qhapaq Ñan as known in the 1920s and 1930s. Source: Regal (1936).

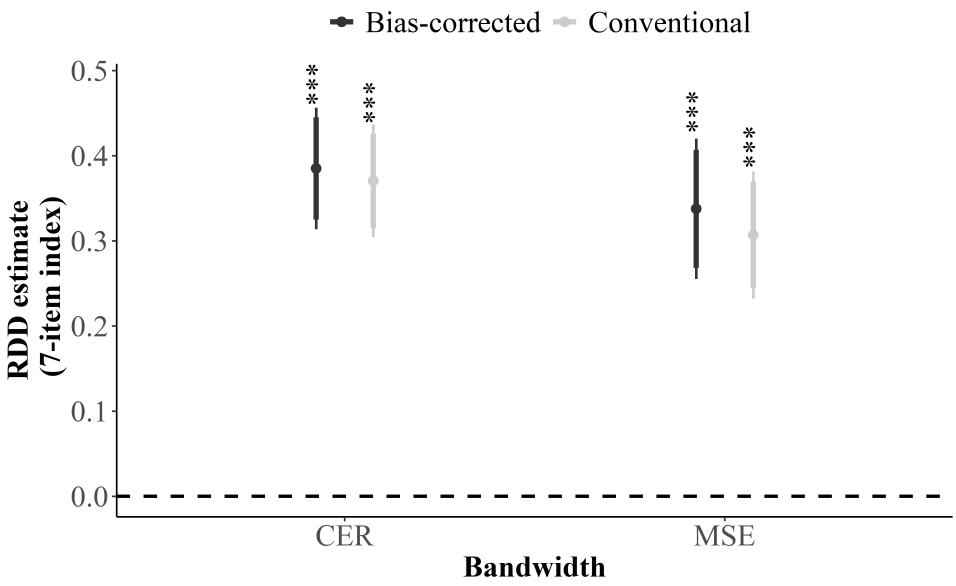
Figure S14. The effect of labor conscription on omnibus measure of accommodation (altitude-weighted running variable)



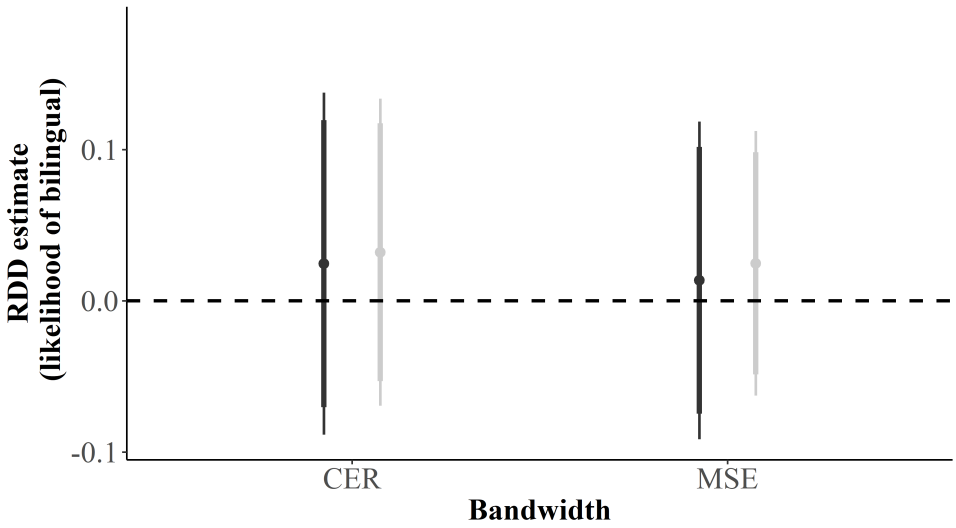

*Note:* *p<0.1; **p<0.05; ***p<0.01. Point estimates taken from a local-linear regression-discontinuity analysis. 90 and 95 percent confidence intervals plotted. Dependent variable is omnibus measure of accommodation. Running variable is the municipality's distance from a border dividing a treated (i.e., Qhapaq Ñan) province from a control one (altitude-weighted). SEs clustered at province level. P-values adjusted for multiple comparisons using a Benjamini Hochberg procedure (5 outcome variables). Bias-corrected estimates include robust confidence intervals. Table D4 contains further information. N=2,560. Source: INEI (2014; 1956).

Figure S15. The effect of labor conscription on institutional/cultural measures of accommodation (altitude-weighted running variable)

(a) Institutions index



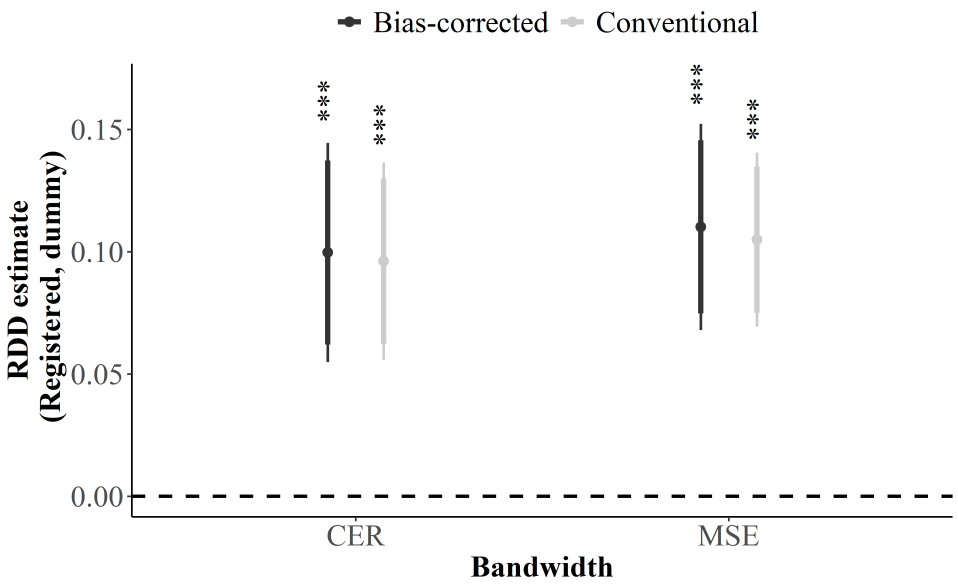

(b) Linguistic measure



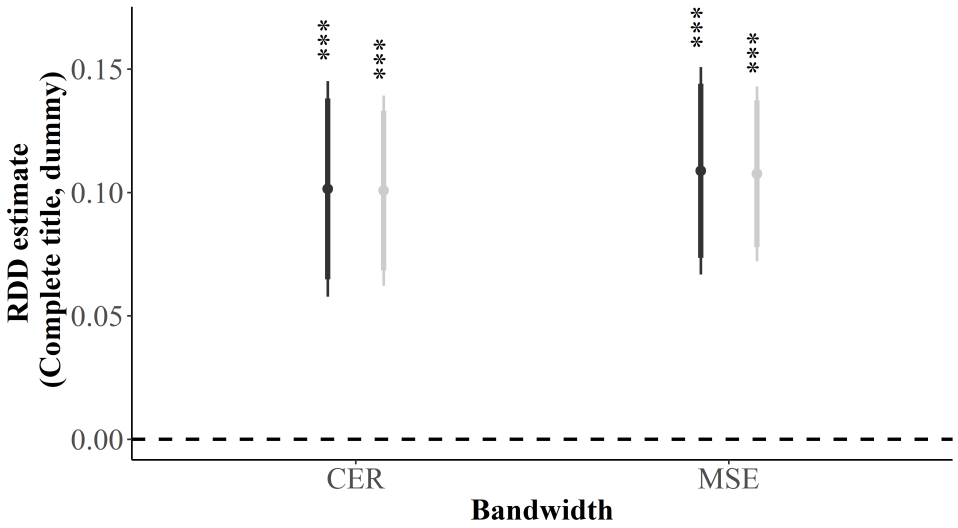

*Note:* *p<0.1; **p<0.05; ***p<0.01. Dependent variables are listed in Table S3. N=2,746. See Figure S14 for specification and sources. Tables D5 and D6 contain further information.

Figure S16. The effect of labor conscription on legal measures of accommodation (altitude-weighted running variable)

(a) Community registered with government




(b) Completed title to communal land




*Note:* *p<0.1; **p<0.05; ***p<0.01. Dependent variables are listed in Table S3. N =2746 (a), 2560 (b). See Figure S14 for specification and sources. Tables D5 and D6 contain further information.

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