Redistributive Colonialism: The Long Term Legacy of International Conflict in India

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Abstract

The growth of European colonial empires occurred during a period of intense international conflict. This paper examines how the international position of colonial states altered the distribution of wealth within indigenous societies. Colonial administrators only favored precolonial elites if they were militarily and financially secure, a pattern that stems from balancing the advantages of working with these groups against their higher probability of revolt. This theory is tested using data on the wealth of Indian caste groups. In areas annexed at times of European war, precolonial elites are poorer than other groups, while they remain richer in areas annexed at other times and in indirectly ruled areas. These results appear not to stem from preexisting differences between regions. The results highlight the variable impact of colonialism within societies, and the importance of the international system in shaping colonial and postcolonial outcomes. Keywords: colonialism; historical persistence; conflict

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Introduction

Numerous studies have shown that variation in colonial institutions can explain variation in contemporary economic and social outcomes.[1] However, in their focus on the effect of long-term institutional differences, these accounts have neglected the interstate rivalries and calculations into which colonial conquest was embedded. We have little understanding of whether and how European political events and decisions, such as the persistent wars that plagued early-modern Europe, altered colonial policy.

Moreover, the existing literature on colonialism has focused on the aggregate effects of policies such as indirect rule.[2] However, as some of these authors recognize, even within regions and nations, some social groups may benefit from colonial policies, such as taxation and government hiring, while others will be hurt by them, and these differences may persist long after the official favoritism or distrust that gave rise to them faded away. Such changes in internal social positioning may produce social "reversals of fortune" just as dramatic as those we observe cross-nationally.[3] This is not to say that these distributional effects are unstudied: Case studies provide strong evidence of colonial favoritism toward specific groups: The Belgians favored Tutsis over Hutus in Rwanda, the British favored Tamils over Sinhalese in Sri Lanka, the Spanish favored Tlaxcalans over Mexica in Mexico. Such favoritism is often thought of as significant as a cause of later ethnic conflicts or social inequalities.[4] However, such single-country accounts leave open many questions, including three potentially important ones: 1) Why the process of colonialism systematically favored some groups over others, 2) whether or not such favoritism actually altered existing patterns of stratification, and 3) whether these effects have persisted to the present day.

This paper suggests that relations between colonial administrators and Indian elites varied based on the diplomatic situation in Europe, and the level of military pressure faced by the colonial power. Somewhat counterintuitively, European conflict is associated with disruption in local social patterns. In European wartime, colonial administrators felt insecure militarily, and tended to view the precolonial elite (the most obvious leaders of a revolt) with suspicion. Similarly, in wartime the fiscal pressure on the colonial state was much greater, increasing its incentive to disfavor existing elites

through methods such as heavy taxation and biased hiring policies. In European peacetime, the military and fiscal pressure on the colonial state was less intense, and the colonial state found it more convenient to leave existing elites in place, borrowing their personnel and (in indirectly ruled areas) their institutions. Incorporation into colonial institutions in turn allowed these elite groups to maintain high levels of socio-economic status.

These temporary patterns persisted over time because they created a self-sustaining equilibrium. Annexation represented a critical juncture when colonial officials were forced to make choices about local institutions: If precolonial officials, networks and institutional arrangements were eliminated during the annexation process, they were impossible to reconstitute later. Moreover, any institutional innovation created influential constituencies that made change more difficults at later periods. British expropriation of local landholders, for instance, not only dissolved the local networks of these landholders but created a new class of landholders eager to cement their position. While many other political changes have occurred in India since that time—land reform, democracy etc.—wealthy and powerful groups can retain these advantages despite political changes, either by accumulating difficult-to-expropriate human capital or manipulating institutional changes to their own advantage. [5] There is considerable evidence that Indian elites adapted both these tactics after independence.[6]

In estimating the effect of European war at the time of annexation, an obvious potential concern is that wartime annexation may be influenced by some attribute of the units themselves, with colonial powers varying the type of territory they annex based on geopolitical factors. There are theoretical reasons for thinking that biased assignment is not a major problem in the Indian case: The dates of European wars were decided in Europe rather than in India and annexation decisions tended to be highly responsive to local political events. This is supported by the available data, since both annexation and military conflict in India are uncorrelated with European conflict. There is also strong support for the contention that areas annexed in European wartime and European peacetime were similar in their social characteristics, since areas annexed at times of European war appear very similar on geographical and social observables to areas annexed at other times.

India, where there was considerable indigenous social stratification, and where the colonial conquest was contemporaneous with a long series of on-and-off wars between Britain and France, is an obvious place to test this theory. The question of cross-group redistribution is particularly urgent in contemporary India, where intergroup economic inequalities are very marked (today, 44% of modern variation in wealth can be explained by caste).[7] In particular, there is substantial variation in the economic position of precolonial landed groups. The fact that landed castes do better economically than other Indians is not particularly surprising, given the sizable head start that they had over most other social groups. What is surprising is that there is sizable variation in this economic advantage. For example, while precolonial landed groups have an average household wealth .64 standard deviations higher than non-landed groups in Bihar, they are slightly poorer than non-landed groups in the neighboring state of West Bengal, which had similar formal colonial institutions and land tenure systems. This variance has direct relevance for the lives of millions of Indians, who find themselves richer or poorer than their neighbors. It has an even greater indirect relevance for the politics and political economy of India, since many students of Indian politics, notably Srinivas, and the contributors to Frankel and Rao,[8] have traced variation in the political performance of Indian states to the social position of landed caste groups.

The quantitative results show that while colonial-era wars have little impact on the wealth of non-landed groups, they dramatically affect the wealth of landed ones. In areas where there was no European war at the time of annexation, landholding groups perform better economically than non-landholding groups. In areas annexed in wartime, this advantage is reversed, with non-landed groups being relatively wealthier than non-landed ones. While wars in India during annexation have similar effects on landed elites to war in Europe, international conflict is an important predictor of local distributional patterns independent of local conflicts, whose intensity they tended to enhance. An empirical strategy based on the time of annexation cannot be directly applied to the large areas of India that were indirectly ruled. As the theory would expect, in these areas landed groups remain wealthy relative to other groups, though these areas also appear to have distinct pre-colonial attributes that complicate causal interpretation.

These results are unaffected by time-invariant characteristics of precolonial and modern states, the actual date of annexation, the land tenure institutions chosen by the British, the party composition of British governments, the fiscal situation of the East India Company, and subsequent changes in caste identity. A set of more tightly focused historical cases studies show that the differential treatment of landed groups was already apparent in the colonial era, and provide direct evidence for a specific colonial policy—land confiscation for non-payment of taxes—as a link between wartime annexation and landed group wealth. The results also hold when we substitute actual measures of Indian resistance to the British for the foreign conflict variables.

These results expand on existing work that emphasizes the importance of colonialism in determining levels of social inequality.[9] However, instead of examining the overall level of inequality in societies, this paper examines whether the social inequalities introduced by colonialism reinforced or subverted existing patterns. It also provides a counterpoint to several ideas about colonial policy with the existing literature, notably that colonial powers tended to support groups with whom they identified culturally (such as India's "martial races")[10] by showing that colonial policy changed sharply over time, and was influenced as much by broader world events as by characteristics of Indian groups.

The theory discussion below will distinguish redistributive and non-redistributive varieties of colonialism develop a framework for explaining their causes, and describe why annexation in European wartime affected perceived colonial levels of threat. It will then describe the data used to measure colonial incentives and contemporary socio-economic outcomes, examine whether the effects of this variation persisted over the two centuries since the British conquest and consider the crucial problem of selection, from both a theoretical and empirical perspective. The paper then discusses how policies at annexation affected the landed castes in two parts of a single state, Oudh, and in two contrasting states, Bengal and Punjab, to explain the exact policy mechanisms by which colonialism shaped income distributions. Later sections examine a wide variety of alternative hypotheses and conclude with a discussion of how the distribution of wealth that occurred during the colonial period has affected Indian politics.

Colonial Weakness and Local Elites

Outside of the settler colonies, the administrators of the European empires were forced to rule large existing populations.[11] These populations often had developed fairly complex systems of social stratification and hierarchy,[12] which often, though not always, were aligned with ascriptive social categories. However, it is unclear what effects colonialism had on this elite group.

Does Colonial Weakness Lead to Stronger Elites?

Perhaps the most obvious argument about the relationships between colonial strategy and local elites is that the weaker the colonial power (whether fiscally or militarily) the more likely it is to ally with local elites. A militarily weak colonial state, this argument runs, would need the most powerful allies it could get, and would thus prefer to accommodate existing powerholders, and might have difficulty displacing them even if it wished to. A militarily weak colonial state might also value stability over conflict, even if it had to give up some revenue to indigenous elites.

Why should we then expect weak colonial powers to behave *more* aggressively than strong ones? Three points deserve emphasis. Firstly, while strong colonizers might see their military power as sufficient to intimidate all opposition, weaker powers might see a preemptive strike or a ruthless exploitation of a temporary military advantage as the only ways to secure long-term dominance. For example, a colonizer equipped with machine guns might perceive indigenous elites armed with flintlocks as quaint, while a colonizer equipped with flintlocks might view them as potential rivals.

Secondly, indigenous elites, being relatively wealthy, presented tempting targets for short-term expropriation, a solution likely to be attractive to a power under severe fiscal pressure. This echoes classic accounts of expropriation as a solution for weak states under severe fiscal pressure [13]. Any project of looting, coercion or forced loans not accompanied by political disempowerment might leave states a group with a strong grievance in a influential position, further increasing the risk of revolt.

A final point is that that the strongest native groups are unlikely to be formally colonized. While situations where Europeans were *very* weak in relation to indigenous

powers have occurred throughout world history, they are likely to be censored out of most datasets on colonialism, since the European power would be unable to establish sovereignty. Such an alliance between European weakness and indigenous strength would resemble instead an ordinary alliance of two powers, rather than colonialism as we understand it. In the South Asian context, the local elites of Afghanistan maintained a strong military position relative to the British, were able to avoid formal colonial rule entirely, and thus avoid being included in any sample of colonial landed groups. Other cases of states that successfully resisted colonialism, such as Japan and Ethiopia, could also be cited. Such arrangements were particularly common in the Early Modern period, when European military superiority was less assured than it later became.

Why Europeans Found Local Elites Threatening

While colonial states differed in the degree to which they were motivated by economic or strategic goals, all of these objectives required the perpetuation of colonial rule, and colonial regimes thus sought to secure themselves against both external and internal military threats. While colonial militaries were usually superior in both technology and organization to their indigenous opponents, victory was not always cheap or automatic. Even if indigenous states could be subdued quickly, guerrilla struggles could drag on for years, as in Libya, Burma, and the Philippines, while the small numbers of the colonizers made revolt a permanent possibility.

To conquer a territory, colonial powers necessarily had to either intimidate or defeat the precolonial elite, who controlled the coercive capacity of their polities, and thus the capacity of these polities for resistance. In the initial stage of colonial institution building, Europeans thus tended to be at risk militarily from members of this group, and to perceive this group as threatening. Even after the conquest was completed, members of such groups were the most likely leaders of a revolt against the colonial state, both because of their inherited military skill and social contacts and because they tended to view themselves, not unreasonably, as the natural rulers if Europeans were removed.

This threat, while always present, became more urgent due to the fact that the

internal politics of colonized areas were influenced by international conditions. Colonial states were not only fighting the local inhabitants, but each other, and the rivalries among European powers assumed a very high priority in colonial security planning. A particular paranoia of many colonial rulers was that their foreign and internal enemies would combine, with native opponents joining the invading army, or being provided with modern arms and training to revolt on their own.[14] This fear was by no means irrational: many of the most successful indigenous political entrepreneurs of the colonial era, such as the Emperor Menelik of Ethiopia or Haider Ali of Mysore, were assiduous in playing the colonial powers off against each other. All but the most torpid pre-modern states were enthusiastic consumers of European weapons and European military advisors. Nor were such strategies always unsuccessful: Menelik used his French rifles to decisively defeat the Italians and maintain his country's independence, while French officers were at the head of the Mysore and Maratha armies that posed the last serious challenge to British hegemony in India.[15]

What made the prospect of external aid particularly credible was that during the period of colonial expansion military conflict was common in Europe, giving rival powers incentives to aid their enemy's enemies in Asia and Africa. From 1756 to 1763, 1778 to 1783, 1793 to 1802, and 1803 to 1815 Britain was at war with France, meaning that these powers, could and did, aid indigenous elites. In wartime, the prospect of external aid narrowed the margin of military superiority that the colonial power possessed over the indigenous elite, at times to dangerous levels. After 1815, Russia gradually became the primary military threat to British India, culminating in an active war from 1854 to 1856.

In many cases, of course, indigenous groups revolted without any prospect of external aid. While the empirics below will focus on the role of European intervention in influencing colonial threat perceptions, Table 4 shows that the main results are robust to using (endogenous) measures of actual local resistance.

The Incentives to Expropriate

Even if local elites remained perfectly quiescent, European wars were stressful periods for colonial administrators, since they increased the fiscal demands on the colonial

state. Even without allies, European enemies could attack a colony directly, with the task of defense being borne by the local budget. Similarly, the government in the metropole might demand that a colony finance an expedition against the colonies of its rival, as when the Indian government conquered Mauritius on Britain's behalf in 1810. Finally, the central government could make or indirect demands for funds, as the British government made of the East India Company during its 18th century wars by raising the tea tax.

The result of this increase in fiscal pressure was that colonial officials needed to collect more revenue, putting pressure on indigenous elites. Even if these elites were more efficient at collecting revenue for the colonial state than other potential alternatives, they represented extremely tempting targets for short-term expropriation. Indeed, as the owners of the only major productive assets in an agrarian society, they were in some sense the only social group with anything to expropriate. Colonial states under fiscal pressure thus very often sought to expropriate the assets, particularly the land, of their indigenous predecessors.

Incentives Retain Local Elites

The fiscal potential of incumbent groups, and the high level of military threat they posed, was counterbalanced by the fact that it was cheap and convenient to work through them. As the traditional administrators of the country, they had access to a set of social networks and institutions that enabled them to extract revenue from and administer justice to politically weaker groups. While the colonial regime could replace them with new men, either outsiders or members of non-landholding groups, such an effort would involve the creation of an expensive set of new institutions. In addition, the new administrators were likely to be inexperienced and would certainly lack the veneer of legitimacy that had eased the operations of their predecessors. In early 19th century Uttar Pradesh, for instance, the British found it difficult to find new buyers for the estates of rebellious or bankrupt landlords, since potential buyers knew it would be difficult, and perhaps physically dangerous, to collect rents and taxes as outsiders in the face of opposition from the relatives and clients of their predecessors.[16]

There were several means by which colonial regimes were able to avoid this kind

of disruption, and incorporate existing elites into their administrative structure. The easiest to implement was to simply leave the precolonial institutions as they were, and allow them to continue their existing practices in return for their acknowledgement of European hegemony. This pattern, usually referred to as indirect rule, was very common within European empires, though there was considerable variation in the amount of autonomy allowed, the degree to which these institutions actually were reflective of traditional ones, and the political level at which indigenous rulers were allowed to operate. In French West Africa, for instance, traditional chiefs were little more than low-level bureaucrats while British India, by contrast, included many princely states of considerable size. While even the largest princely states retained only limited autonomy, their existence enabled rulers to retain a measure of authority and influence, and the ability to offer jobs to their relatives and coethnics.

Even when the colonial power chose to administer an area directly, it could take steps to ensure that the existing elite retained a position of political importance. It could, for instance, hire members of the former ruling groups for positions within its bureaucracy, and provide them with educational opportunities. Even if it did not have a conscious policy on hiring, its choice of the language of administration and the cultural practices of the government could influence which groups sought employment there. In Northern India, for instance, the maintenance of Persian as the language of the courts until the 1870s favored official employment of Muslims, while its replacement by English disadvantaged them. Even when the government included few locals, the colonial regime could favor or disfavor a group through the expropriation of property, a process that occurred all too frequently during the colonial period, and for which we have especially good evidence in India.

Critical Junctures and Persistence

Colonialism was a process that lasted at least several decades, and at most several centuries. During this time, colonial states were free, at least in theory, to pursue a wide variety of policies. However, the choices made in the period immediately after the conquest exercised a disproportionate influence on what options were available, since reversing these choices—particularly destructive choices—was often difficult or

impossible. Most importantly, authorities at the time of conquest faced an unavoidable choice as to which elements of the precolonial elite and institutional arrangements to retain. If they choose to destroy these institutions, future generations of officials would find it difficult or impossible to reconstruct them from scratch.[17] Once a local aristocracy was killed or exiled, it became difficult or impossible to reestablish them in their former positions, given that the social networks and personal relationships on which precolonial institutions depended would have been disrupted.

Moreover, at the time of conquest colonial states were more autonomous with respect to local society then they would become. At the time of conquest, European educational and political institutions were a novelty, and were not associated with any particular social group. Whatever policy they choose with respect to the local elite, later colonial officials often found themselves tangled in a web of commitments and local interests and made policy change increasingly difficult. Changes to the institutional structure as a whole would also be frustrated by the interest group resistance and institutional stasis described in the literature on critical junctures, effectively freezing in place the patterns of favoritism that were seen at the time of the conquest. After the first generation, the groups that had gained access in the early years would have a good chance of keeping that position in later years, due to their familiarity with and connections within the existing system. The British in 18th century India, for instance, guaranteed a set of tax rates in perpetuity in some areas (the Permanent Settlement), and found it difficult to raise taxes subsequently without a loss of credibility. Similarly, once a decision was made to recruit officials from specific ethnic group, officials from that group became a powerful constituency in favor of continuing this policy. This is not to say that colonial policy would not evolve as the security situation changed: In India for instance, favoritism toward the martial races in military recruitment emerged only after 1857. However, such altering such patterns became increasingly difficult as time passed after annexation.

The "time of conquest" is of course somewhat different from the formal date of annexation, and the types of institutional choices discussed in this section might take place over several years. In a later section we will see that the empirical results are not sensitive to the use of the date of annexation, and that identical results can be

obtained by using the date at which an area first entered into a treaty with the British.

Even if a colonial government ceased the policies that benefited or disfavored particular groups, or if these benefits ceased at independence, we might expect the economic differences they created to persist over for long periods of time, absent a revolution or other social transformation. Members of wealthy groups might be able to invest in higher levels of human capital, such as education and health care, for their children, and in the ownership of productive assets, ensuring that their social and economic advantage reproduces itself in future generations even after they lost their political advantage. While subsequent social trends such as urbanization and industrialization might attenuate these patterns, they rarely seem to do so entirely, as this fact is consistent with repeated findings of long-run historical persistence in the existing literature.[18]

One final factor has tended to increase the persistence of social inequality in India: While many political changes have occurred, their local implementation has often fallen into the hands of incumbent elites, who have either ignored them or reduced their effect. This pattern of elite cooptation has been observed for many social changes in India, such as land reform[19], democratic local institutions,[20], and laws against caste discrimination.[21]

European Conflict and Colonial Weakness

European Wars and Indian Policy

If colonial security and fiscal needs effected distributional needs, did international conflict affect the security and fiscal environment of colonial governments? The idea that international conflict in Europe affected military strategy and fiscal policy in South Asia is echoed in the historical accounts of the period. In particular, European wars put increased demands on the colonial military. In the 1750s, this took the form of a regular war in South India, where the French had a sizable army and a territorial presence. After this period however, the threat outsiders posed to the British was less from the direct use of troops as from their potential influence over Indian powers. In Hyderabad, Bengal and Carnatic, there were recognized pro-French parties at court,

and at Hyderabad in particular the French succeeded in using their control of the western-trained army to virtually dictate state policy. Indian rulers were well aware that the French presence gave them an outside option in the weapons trade—the first Anglo-Mysore War was prompted by Mysore's anger at the British capture of their former source at the French fort at Mahe (1779), itself a result of France's involvement in the American Revolution. Such contacts continued during the revolutionary wars, during which a large French military mission was sent to Mysore in 1798. European soldiers of fortune also contributed to the military efficiency of the Maratha and Sikh armies.[22]

These international connections caused considerable unease in the English camp, and it is notable how rulers who intrigued with the French were much more severely dealt with than those who did not. Tipu Sultan of Mysore, in particular, became something of an Anglo-Indian hate figure, with his alliance with the French taken as evidence as a global conspiracy against British liberties.[23] After his defeat, Tipu's Muslim dynasty was deposed and replaced by a Hindu one. A similar process occurred in Bengal in 1760, where the British discovered that the Nawab, Mir Jafar was attempting to form a military alliance with the Dutch East India Company. This led to the deposition of the Nawab, the annexation of the coastal portions of his territory, and the further involvement of the Company in Bengali politics. Fear of French and Dutch involvement was also a major factor in the First Anglo-Maratha War (1775-1778) and the peace treaty that ended the war granted sizable territorial concessions to the Marathas in return for a promise not to have dealings with any other foreign power. These examples could be multiplied ad nauseam, even after 1815, where the Russian threat was often perceived as more threatening than the French one.

This concern is reflected in correspondence between colonial officials, who frequently comment on and debate the probable consequences of war and peace in Europe. To take one example, a sizable crisis within the governor general's council was caused by the news, in the spring of 1778, that France was planning to enter the American Revolutionary war, which led Phillip Francis to call for a rethink of company policy.

> "I would wish that the board consider whether this unfortunate event in America ought not to have a general influence upon our measures here...and whether policy and prudence do not plainly indicate to us that, while the nation is so deeply engaged and pressed on one

side, with everything to apprehend from the designs of France and Spain on the other, that we should stand on the defence."[24]

The poorer security situation during European wars was reflected in the Company's fiscal situation. Focusing only on years in which annexations took place, the company's military expenditure averaged 57.2% of expenditure in European war years and 46.2% in European peace years. (East India Company accounts, various years.) Combined with slightly higher civilian expenditure (often on war-related expenses like ships, forts and debt service) the company'Ăs expenditure increased by 24% in European wartime.

Identifying an Elite Group

Thus far the discussion has treated the precolonial Indian elite as a unit. However, there was considerable internal variation among these groups. All Indian regions had a set of wealthy landowning groups, and, in a pre-modern society, the control of land, the principal source of economic production and government revenue, was inextricably associated with the exercise of political authority. Landholders, such as the jagirdirs and zamindars of the Mughal Empire, tended to dominate both revenue collection and the military, sometimes in opposition to the states they were pledged to serve. However, there were also groups of wealthy Indians, such as the Brahmans and Kayasths, with weaker connections to land, such as long distance traders, and religious or clerical specialists. While members of these groups could be quite wealthy, their power at a local level was usually much weaker than that of the landholding elite.

This distinction between landed and non-landed groups is theoretically important. Since the various urban elite groups were less likely to have military authority in pre-colonial times than landed groups, we should expect them to appear less threatening to colonial states, and thus less likely to suffer in any colonial redistribution of wealth. For this reason, the empirical analysis here will focus on the effects of colonialism on landed groups. The mechanics of defining landed caste status, and the implications of alternative definitions, are discussed below. All the main results are robust to redefining elite status to incorporate the major high-status non-landed groups.

Were these landed groups in fact wealthy in precolonial times? Traveler's accounts of India frequently contrast the miserable economic position of village laborers and

craftsmen to those of farmers, and that of tenant cultivators to those of more secure agricultural proprietors.[25] As many scholars have noted, the concentration of political power within local landed groups became even more marked after the collapse of Mughal power, as the anarchic conditions prevailing in many parts of South Asia in the 18th century enabled local zamindars to assert their independence, at times acquiring sizable military forces,[26] and in the cases of the Rohillas, Marathas, Jats and Sikhs, large empires.

Predictions

The theoretical discussion examined three major factors in the internal calculations of colonial bureaucrats: Suspicion of revolt and military threat, desire to raise revenue, and the inconvenience and expense of replacing indigenous landholding elites wholesale. Military threat and fiscal necessity would tend to encourage discrimination against indigenous elites in favor of outsiders or less powerful groups, while administrative convenience would tend to encourage favoritism toward of the existing elite. While the influence of all these factors should change over time, they should be disproportionately influenced by circumstances at the time of annexation. The theory section argued that the existence of a war in Europe threatened the colonial regime and increased its need for money, and should thus be a strong negative predictor of the level of the regime's willingness to incorporate existing elites. Elite incorporation, in turn, should be associated with high levels of socio-economic status, since political power, western education and control over land all can easily be translated into economic resources. The hypothesized empirical relationship can be summarized as:

Wartime Annexation $\rightarrow$ *Colonial Military Threat* $\rightarrow$ *Low Elite Incorporation* $\rightarrow$ *Low Elite Socio-Economic Status*

Which can be restated as:

> H1: In areas annexed at times when the colonial power is at war elsewhere, the precolonial elite will tend to have lower socio-economic status relative to other groups than in areas than in areas where colonial institutions annexed when the colonial power was at peace.

As stated, this hypothesis is agnostic as to whether the precolonial elite in low threat areas will be favored through being left alone (indirect rule) or through a more active policy. However, since in the Indian context indirectly ruled areas were never annexed, an empirical strategy based on the time of annexation is not useful in these areas. In addition, while (as we will see) wartime and peacetime annexed areas are similar to each other on precolonial attributes, indirectly ruled areas differ substantially from directly annexed ones. The main empirical results will thus focus on directly ruled areas. However, the results section will show that landed groups do better economically than other groups in the princely states.

Data

Time of Annexation

In this study, the year of annexation is measured at the level of the 1991 district of India. This was chosen rather than the precolonial territory because many precolonial polities had different parts of their territory annexed at different times.[27] Jammu and Kashmir, the hill states of Northeastern India, and the directly-ruled union territories were excluded from the analysis.[28] The main analysis will code annexation as occurring in the year the East India Company formally acquired the right to collect taxes in a district, since the acquisition of taxing power implied making an immediate set of decisions about the status of incumbent elites.[29]

To account for the spatial lumpiness of the wartime annexation variable, the reported models include fixed effects for precolonial states and have their standard errors clustered at the level of the district. For this purpose, precolonial states are coded based on the 1756 status quo. Certain areas dominated by interrelated groups of small chieftains, such as the Sikh confederacy in the Punjab, were coded as single polities. Altogether this method divided India into 84 18th century states, of whom 36 had some portion of their territory directly annexed.

The Landed Castes

Defining social groups in the Indian context is a complicated process, since groups are often nested within the others, or part of cleavage dimensions that crosscut each other. In this paper, I use the basic unit of the caste system, the jati.[30] Jatis are of relatively small size, and are often tightly specialized by occupation, making the sorting of jatis into landholding classes relatively straightforward. Also, since caste as a dimension was highly relevant to colonial policy makers,[31] we have reason to expect that any British favoritism would be directed along caste group lines. [32]

Only a few of these castes, however, have the traditional social prestige and connection with landed political power that defined the precolonial elite. Landed caste status was coded based on the provincial volumes 1911 census, which listed the traditional occupations for groups as defined by the colonial authorities, with landed castes being those whose traditional occupation (the occupation the census superintendent believed the caste followed in ancient times) was listed as "landowning," "military" or "dominant."' This is obviously only an imperfect measure of precolonial elite status. Table A.8, shows that the results are robust to a wide variety of alternative definitions of social elites including coding all upper caste groups as landed and focusing on India's two most prominent pre-colonial Hindu ruling groups, the Rajputs and Marathas. Table A.6 examines a related issue, the opportunistic movement of individuals among caste groups.

The Dependent Variable

The dependent variable of interest in the modern era is the socio-economic status of individuals. Socio-economic status is a broad concept, and includes not only wealth but education, occupation and generalized level of social status. The main results will concentrate on wealth, measured at the household level. Wealth was chosen because it is relatively well measured, and because it is less influenced than some other elements of socio-economic status by changes in state policy over the past few decades. The major results are robust to substituting education, nutrition, and professional employment as the dependent variable.

The individual data was taken from the second round of the National Family Health Survey, conducted in the cool season of 1998-1999 and made available in a recoded version through Measure DHS (International Institute for Population Sciences 2000).[33] Unlike the vast majority of Indian surveys, such as the census and the National Sample Survey, the NFHS records the actual caste of the individuals, making it uniquely suitable for studying group-level redistribution. The data was collected through a clustered design with the clusters representing either urban neighborhoods or rural villages.

Within the NFHS data, wealth is measured as a factor score based on whether a household possesses a set of household goods or improvements, such as radios, bicycles, paved floors and kerosene stoves. This indirect approach to measuring wealth is common in surveys in poor countries, given that many households hold large portions of their wealth in assets that are not easy to value in cash. By construction, this measure has a mean of zero and a standard deviation of one.

The Unit of Analysis

The quantity of interest for the theory is the difference in wealth between landed and non-landed castes in different types of districts. The unit of observation is thus the district-caste category, with two observations per district (one each for landed and non-landed groups.)

There are a variety of alternative ways of organizing the analysis, none of which affect the results substantively. These include confining the dataset landed castes and estimating the effect of threat directly, taking the differences in category wealth for each district as the quantity of interest, taking the district-jati as the unit of observation, and taking the household as the unit of observation (preserving the original structure of the survey data). These alternative specifications are reported in Table A.4.

Estimating Equation

Since we are interested in the effect of Wartime Annexation on Landed Castes, the independent variable of interest is the interaction of these two variables. The basic

model, estimated as Model One of Table 2, is thus:

$$Wealth_{cd} = \pi LandedCaste_c + \delta WarAnnex_d + \rho WarAnnex_d * LandedCaste_c + \epsilon_{jd} \quad (1)$$

With $Wealth_{cd}$ being the wealth of each caste category-district.

In all these models, the standard errors will be clustered at the district level, to account for the possible non-independence of observations of group wealth within districts.

Results

The Raw Data

Hypothesis One predicts that differences in the *relative* wealth of landholding and non-landholding castes should be related to the circumstances of their annexation. These differences are in fact apparent in the raw survey data. Table 1 shows the mean levels of caste wealth by annexation status. In the princely states, where the redistributive impact of colonialism was minimal, we should expect the differences between landholding and non-landholding groups to be substantial. This is in fact what we observe: In princely states, landed groups have an average wealth score .22 of a standard deviation higher than their non-landholding peers.

The difference between landed and non-landed groups is even larger in areas annexed at times of European peace, where .42 standard deviations separate the two groups. In areas that were annexed at times of European war, this pattern is completely reversed, with landed groups being slightly poorer than non-landed ones, by .17 standard deviations. The difference in intergroup differences between the two types of directly ruled areas is the variable of interest, corresponding to ρ in the estimating equations. The fact that this difference is large and statistically significant provides strong support for Hypothesis One.

These differences among groups and regions are shown graphically in Figure 1. In indirectly ruled and peacetime-annexed areas, landholding groups have a higher economic status than non-landholding groups in 1998. This presumably reflects the

Table 1: Wealth by Annexation History and Caste in India

Annexation Status			
CASTE	Peacetime	Wartime	Princely
Non Landholding Caste	-0.124 (1.01) N=30400 n=170	-0.0751 (0.973) N=1638***Note:***4 n=55	-0.075 (0.976) N=22028 n=112
Landholding Caste	0.300 (0.94) N=3233 n=170	-0.242 (0.85) N=949 n=79	0.142 (0.93) N=1982 n=133
Differences	0.42 (0.01) p=0.000	0.17 (0.03) p=0.000	0.22 (0.02) p=0.000

Note:The first number in each box is the weighted sample mean for that category, with its standard deviation in parentheses. N represents the number of survey observations in each category, while n represents the number of category-districts. The numbers in the third row are the between group differences, their standard errors, and the p value of the two tailed test. As explained below, these observations are collapsed to the district-category level in the main analysis, weighted by the number of observations. ***Source:*** India National Family Health Survey 1998-9. See text.

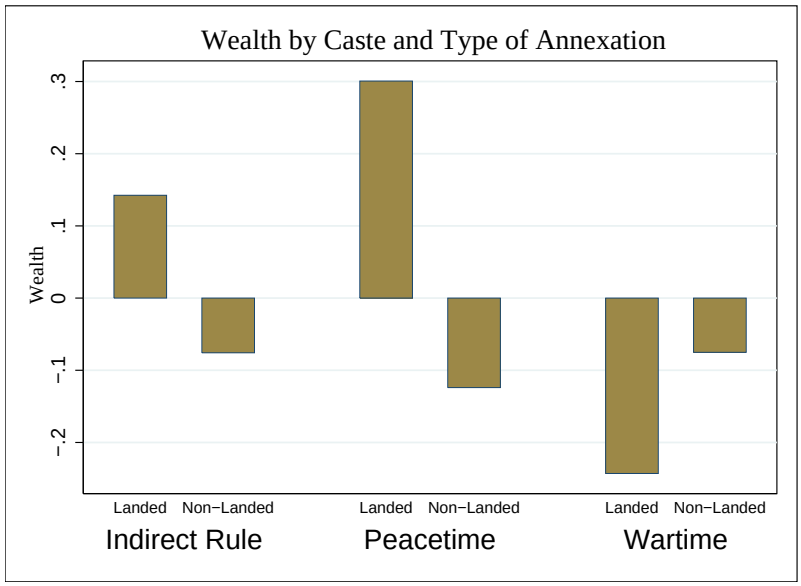
precolonial situation, where these groups were substantially wealthier than the rest of society by virtue of their control over the primary economic asset. However, landed groups are actually poorer than non-landed groups in areas annexed in peacetime.

Main Results

Table 2 shows the results of a set of linear regressions with household wealth as the dependent variable. The standard errors in each model are clustered by districts. In each model, the independent variable of interest is the interaction of the wartime annexation and landed caste variables. Hypothesis One predicts that this variable will have a negative value, indicating that landed groups in areas annexed at times of military threat do poorly relative to their coethnics elsewhere in India.

The main specifications test this by measuring the interaction effect between landed castes and colonial annexation.[35] Model One includes only the coefficients of interest, without any fixed effects. The effect of wartime annexation on landed groups is substantial and negative, being associated with a lower wealth score of -.59 standard deviations. While in areas annexed at times of European peace the average landed group has

Figure 1: Wealth by type of Annexation



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Note:Weighted mean levels of mean district-jati household wealth, by caste category and type of annexation.

a wealth score of .42 higher than the average non-landed group, in areas annexed at times of European war the landed groups are .17 standard deviations poorer. Interestingly, the direct effect of wartime annexation is small and statistically insignificant, indicating that non-landed groups have very similar levels of wealth in wartime and peacetime-annexed areas, consistent with the claim that these areas are similar to each other than for the redistributive impact of European conflict.

Model Two adds controls for the size of the landed castes within each districts, and the interaction of that measure with the landed caste variable. This variable is intended to account for the inescapable economic differences between small landed elite groups and larger, more inclusive ones. Since large landed groups (such as the Marathas) tend to be poorer than smaller, less heterogeneous groups (like Rajputs) controlling for groups size improves estimates of the effects of colonialism. Interestingly, the effect of a large landed caste population is very substantial and negative, showing that, notwithstanding colonial favoritism, it is difficult for a large group to maintain a consistently high socio-economic status. Model Three adds fixed effects for precolonial states as they existed in 1756. After including this variable, the effect of wartime annexation on landed castes is still statistically significant and negative.

Table 2: Main Results: Linear Regression with Wealth as the Dependent Variable

VARIABLES	(1) Basic Model	(2) Pop. Controls	(3) State FE	(4) Border Dist.	(5) State *Caste FE
Landed Caste	0.425***	0.649***	0.519***	0.548***	1.012***
	(0.0588)	(0.123)	(0.0698)	(0.106)	(0.0228)
Wartime Annexation	0.0489	0.108	0.334*	0.0250	0.335*
	(0.132)	(0.126)	(0.190)	(0.114)	(0.198)
Wartime Annex.	-0.592***	-0.672***	-0.300***	-0.287**	-0.415**
*Landed Caste	(0.121)	(0.124)	(0.112)	(0.127)	(0.181)
District Prop.		1.69***	0.177	0.286	0.181
Landed Caste		(0.794)	(0.453)	(0.565)	(0.499)
Dist. Prop. Landed		-2.07***	-1.853***	-1.788**	-1.969***
Caste* Landed Caste		(0.707)	(0.430)	(0.854)	(0.684)
Constant	-0.173	-0.373**	-0.558***	-0.288	-0.100
	(0.203)	(0.167)	(0.214)	(0.188)	(0.241)
Observations	443	443	443	175	443
R-squared	0.030	0.085	0.527	0.023	0.533
State FE	NO	NO	YES	NO	NO
State*Landed FE	NO	NO	NO	NO	YES

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note:Linear regression with household wealth as the dependent variable. The unit of observation is the district-caste category, weighted by the number of sampled households. The standard errors are clustered by districts. The column headings describe the type of model used.

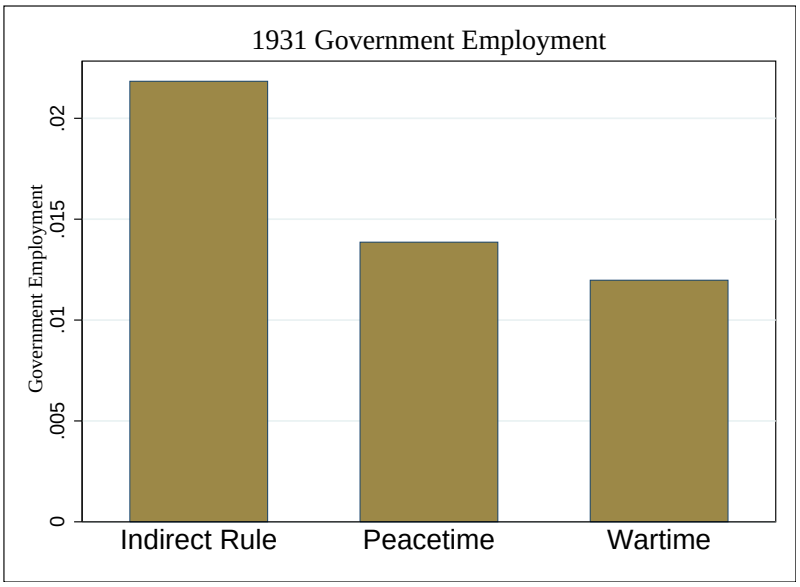
Could these results be based on some unobserved spatial difference between districts? Model Four concentrates on districts which border a district of different annexation status. These districts should be presumably differ from each other on unobservables much less than districts in the full sample. Among border districts, the negative effect of wartime annexation on landed groups remains strongly negative.

Model Five of Table 2 provides more evidence against the effect of unit-specific confounders, including dummy variables for each precolonial state and the interaction of the landed caste variable with those dummies. This means that in this model the reported differences in wealth between the two types of landed groups are a product of within state differences (since cross-state differences in landholding group wealth are perfectly predicted by the new vector of fixed effects). The effect of wartime annexation remains statistically significant and negative, and in fact rises substantially relative to the main fixed effect model.

One interesting aspect of the data is that non-landed groups have very similar levels of wealth in war-annexed and peace-annexed areas, meaning that they have

benefited relatively little from the changes in landed caste status. The creation of new, often urban, elite groups was a common feature of colonial rule, as in the first educated groups in French West Africa.[36] Qualitative evidence indicates that the British sometimes pursued this policy in India, and historical accounts have frequently argued how groups such as Pharsis, Marwaris, Kayasths and Brahmans benefited from British rule. It is difficult, however, to identify any such effects in the NFHS data, indicating that the distributive effect of colonialism occurred primarily due to the weakening or strengthening of traditional elites, rather than the creation of new ones.[37]

Figure 2: European Wartime Annexation and Colonial Public Employment



Note: The bars indicate the mean level of public employment in different types of districts, based on the 1931 census. ***Source:*** Census of India, 1931.

The fact that policies that hurt the landed caste do little for non-landed groups may result from the fact that state institutions in war-annexed areas are employed very few people. Figure 2 provides some evidence to support this contention, showing that areas annexed in wartime have slightly lower levels of government employment in the late colonial period.

Princely States

Not all areas of British Indian were directly ruled—in many areas of India, the British let local princes retain considerable autonomy. This lack of annexation is another possible mechanism through which colonial rulers could favor or disfavor incumbent elites, since Hypothesis One made no distinction between the maintenance of native elites in their existing positions through mechanisms such as indirect rule or the active incorporation of these elites within western-style institutions. Both policies have similar observable implications, since they will allow the landholding elites to maintain or expand their existing economic advantages. Indirect rule may thus be an alternative pathway by which landed groups may benefit from colonialism, or at least minimize their losses.

The results reported above deal only with directly ruled areas, since it is only possible to analyze the effect of military threat at the time of annexation in areas that were actually annexed. In addition, we have strong reason to believe that indirectly ruled areas might differ substantially from directly ruled areas in their level of precolonial political and economic development.[38]

However, we might expect the positive effect of indirect rule on landed castes to be more limited than the effect of direct rule by a militarily secure colonial state. The majority of the princely states of India, like indirectly ruled polities in other parts of the world, tended to centralize power in the hands of a single ruler and his friends and relatives, and distributed resources through informal channels that marginalized groups not connected to the ruler. The Rajput rulers of Rajasthan, for instance, distributed resources to Rajputs and a few Brahmans, excluding the large and relatively wealthy groups of Jat cultivators. We might thus expect the effects of indirect rule on the landed class as a whole to be mixed, with the ruler coethnics benefiting at the expense of other landed groups.

Table reftable:prince tests the effect of princely rule on contemporary distributions of wealth. Model One codes princely states as having been annexed at times of European peace (reflecting the expectation that both arrangements should favor elites), while Model Two codes the princely states separately, adding measures of wartime annexation. Whichever model is chosen, wartime annexation has a significant and negative effect

on landed castes, with the effect being somewhat larger than that estimated in Table 2. The effect of princely rule on landed castes, however, is small and statistically insignificant. One possible reason for this is suggested in Model Three, which examines the effect of indirect rule on the caste group of the ruler. District-Castes from the same caste category as the state's ruler tend to have a higher level of wealth than members of the same caste without this advantage. This would tend to support the hypothesis that, even if indirect rule does not benefit the landed class as a whole, it does tend to benefit the ruler's relatives and dependents. It also shows that the logic of the theory extends outside the subset of Indian districts that were formally annexed.

Table 3: Princely States: Linear Regression with Wealth as the Dependent Variable

	(1)	(2)	(3)
	Princely State	Full	Princely
VARIABLES	as Low Threat	Sample	States Only
Landed Caste	0.344***	0.604***	-0.0644
	(0.0474)	(0.105)	(0.129)
Wartime Annexation	0.0286	0.0936	
	(0.112)	(0.126)	
Wartime Annex.	-0.512***	-0.655***	
*Landed Caste	(0.116)	(0.122)	
Princely State		0.0898	
		(0.188)	
Princely State		-0.158	
*Landed Caste		(0.117)	
District Prop. Landed Caste		1.295**	0.760*
		(0.531)	(0.390)
Dist. Prop. Landed		-1.621***	-1.551***
Caste* Landed Caste		(0.604)	(0.495)
Princely Ruling Group			0.855***
			(0.211)
Constant	-0.132	-0.325*	-0.154**
	(0.148)	(0.169)	(0.0702)
Observations	688	688	245
R-squared	0.023	0.068	0.086
State FE	YES	YES	

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note:Linear regression with household wealth as the dependent variable. The unit of observation is the district-caste category, weighted by the number of sampled households. The standard errors are clustered by districts. Model One codes princely states as having been annexed at times of European peace, while Model Two codes the princely states separately

Endogenous Measures of Military Threat

The models in Table 2 use as their independent variable a determinate of military threat, geopolitical conditions in Europe, which has the attractive property of being relatively independent of local conditions in India. However, there are a number of factors associated with the level of military and fiscal threat experienced by the British, and their treatment of landed groups, that do not have this property. In particular, colonial powers might be particularly disposed to view landed groups as threatening if they fought the colonial power, either during the annexation process or subsequently. Similarly, groups that fought for the colonial power might subsequently be viewed as non-threatening, quite independent of their social or geographical position. Groups that fought might also be deprived of land and resources as a punishment, leading to redistributive effects similar to those described in above.

The most obvious endogenous measure of military threat is whether there was a military confrontation with the British at the time of annexation. In such areas, colonial officials had actual evidence of the potential hostile intent of the local elite, and the punishment of defeated opponents provided an opportunity for the destruction of existing political arrangements. The policy of punishing defeated opponents was by no means always followed, since many of the "martial" groups of Northern India gained their military reputation, and the admiration of colonial officialdom, through energetic opposition to colonial expansion. Model One of Table 4 includes a measure of forcible annexation and its interaction with landholding. As expected, landholding groups do worse in areas annexed by force. In Model Two the effect of resistance to annexation remains statistically significant, though its inclusion does not change the effect of wartime annexation. Both local and external factors, it seems, determine the redistributive effect of colonialism.

The rebellion of 1857, which temporarily destroyed colonial institutions in most of Northern India, had far reaching impact on colonial policy towards rural Indians. In particular, groups that stayed loyal to the British, notably the Jat and Sikhs of the Punjab, came to be viewed more positively than groups that were conspicuous in the rebellion, notably Rajputs, Muslims and Brahmans from Oudh and Bihar.[39]. Model Three of Table 4 examines whether being in a district affected by the rebellion, had

Table 4: Endogenous Military Threat: Linear Regression with Wealth as the Dependent Variable

VARIABLES	(1) Wealth	(2) Wealth	(3) 1857	(4) 1857
Landed Caste	0.701***	0.867***	0.465***	0.636***
	(0.133)	(0.130)	(0.158)	(0.135)
Wartime Annexation		0.104		0.119
		(0.128)		(0.130)
Wartime Annex.		-0.623***		-0.634***
*Landed Caste		(0.149)		(0.130)
Resisted Annexation	-0.0205	-0.0117		
	(0.0605)	(0.0605)		
Resisted Annex.	-0.160**	-0.135*		
*Landed Caste	(0.0755)	(0.0727)		
District Prop. Landed Caste	1.598**	1.699**	1.602**	1.715**
	(0.725)	(0.717)	(0.686)	(0.689)
Dist. Prop. Landed	-2.006***	-2.299***	-2.008**	-2.274***
Caste* Landed Caste	(0.708)	(0.748)	(0.813)	(0.803)
1857 Revolt			0.197	0.358*
			(0.202)	(0.198)
1857 Revolt			3.561***	3.333***
*Sikh or Jat			(0.573)	(0.626)
Constant	-0.192*	-0.351*	-0.140*	-0.303*
	(0.106)	(0.198)	(0.0777)	(0.168)
Observations	443	443	443	443
R-squared	0.073	0.089	0.174	0.191

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note:Linear regression with household wealth as the dependent variable. The unit of observation is the district-caste category, weighted by the number of sampled households. The standard errors are clustered by districts.

a negative effect on the landed castes. In areas affected by the mutiny, coded based on Schwartzenburg and Bajpai[40], groups widely thought to have stayed loyal to the British (Sikhs and Jats) are wealthier than their coethnics elsewhere. In these areas members of groups widely thought to have participated in the rebellion, Brahmans, Rajputs, Upper Caste Muslims, and Bhumihars, do more poorly than members of these groups elsewhere though this difference is not statistically significant. In Model Four we see that controlling for the effect of the rebellion has no effect of wartime annexation on landed group wealth.

Colonial Data

If the differences in wealth that we observe in 1998 can be traced to differences in the policy of the colonial state at the time of annexation, we should expect them to

already be evident in the late colonial period. Indeed, we should expect differences between groups to have been larger in this period, since the economic status of groups will have been unaffected by the policies of the post-colonial government. However, if these differences are a product of government favoritism, we should expect them to be concentrated in goods closely associated with the colonial government, in particular employment in the government itself.

This pattern can be seen in the available data on caste level rates of employment in the colonial state sorted into landed and non-landed castes. The data in these figures is drawn from the 1911 census of India, and was collected at the level of the province—no detailed colonial data at the caste-district level exists. Because provinces have many areas annexed at different times, I use an imperfect, highly aggregated categorization, grouping provinces into princely states, "Coastal Provinces" (Bengal, Madras and Bombay) and "interior provinces" (Punjab, Bihar and Orissa, the Central Provinces and the United Provinces). In 1931, landed groups in all parts of India were more likely to be employed in the public sector than other Indians. However, this advantage varied in size from region to region, being very large in the princely states (with their large public sectors of close relations), smaller in the interior provinces and virtually non-existent in the coastal provinces. This relationship is shown in the form of a linear regression in Model One of Table A.2.

Potential Selection Effects

Selective Annexation Policy?

The most obvious problem with identifying the effect of annexation timing is that while military conflicts in Europe might well affect the colonial state's military and fiscal strain, areas annexed in wartime might also be different from each other in a number of ways that might be correlated with their contemporary economic position. However, the historical evidence about particular annexation supports the idea that the timing of conquest in India depended largely on local political factors, such as the deaths of Indian rulers and British military success in India. If annexation processes were similar in wartime and peacetime, it would provide strong evidence that the annexed

Table 5: Colonial Era-Socioeconomic Status: Linear Regression

VARIABLES	(1) Public Administration	(2) English Literacy	(3) Literacy	(4) Land Cultivation
Landed Caste	0.0438***	-0.00908	-0.0717***	0.196***
	(0.0110)	(0.00687)	(0.0208)	(0.0489)
Landed Caste* Coastal	-0.0529**	0.00536	0.0316	0.0219
	(0.0250)	(0.0136)	(0.0411)	(0.111)
Constant	0.0227*	-0.000233	0.0496**	0.224***
	(0.0123)	(0.00979)	(0.0251)	(0.0570)
Observations	303	349	354	302
R-squared	0.242	0.225	0.581	0.483
Caste Status FE	YES	YES	YES	YES
Province FE	YES	YES	YES	YES

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note:Linear regression with the province-caste as the unit of analysis. The dependent variables (listed in the column headings) are the proportion of males in each province-caste holding a particular occupation at the 1911 census.

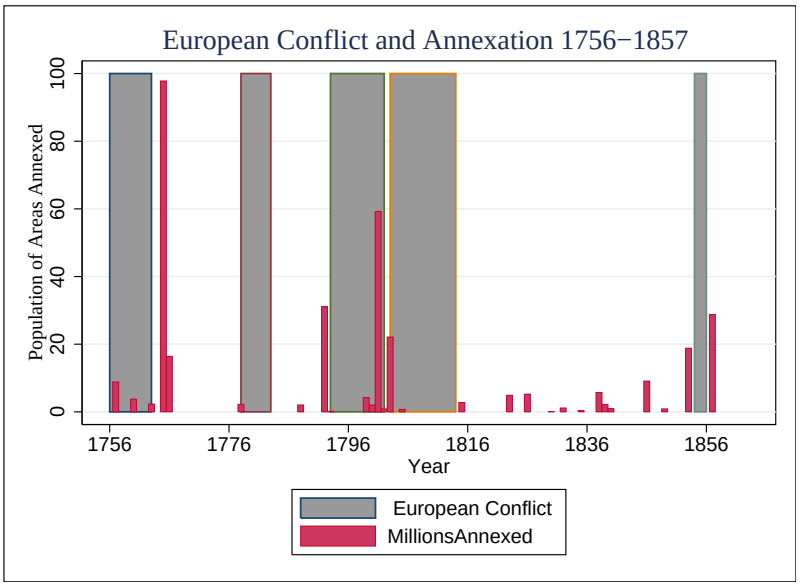
areas were similar.

One of the strongest pieces of evidence for this view is that annexation is uncorrelated with European War. Of the 251 districts of India that were directly ruled, 78 (30.3%) were annexed during years of Europeans war, which covered 32.7% of the years during this period.[41] Figure 3 shows this pattern graphically: Annexation is just as prevalent in wartime as in peacetime.

Even more interestingly, military conflict in India is uncorrelated to military conflict in Europe. In European peacetime, the Company was at war with an Indian state in 56.7% of years, while in European wartime it was at war in 55.5% of years. While external aid meant that a few of the Indian conflicts fought in European wartime were especially hard fought (since they pitted the EIC against formally organized armies) this provides such evidence that neither European nor Indian powers were initiating conflicts based on the European situation.

It might, however, be possible that the British had different "tastes" in annexing territories, and that these tastes were influenced by the military situation. There is no historical evidence for such careful consideration of local characteristics in annexation decisions, and it is not clear what such a mechanism might look like, or if it would tend to work for or against the hypothesis.[42] In addition, we will see below that wartime

Figure 3: European Wartime and Indian Annexations



Note:Grey areas indicate European wars. Red bars indicate millions of Indians annexed to British India.
Source: Census of India, 1901 and Schwartzberg, Joseph, and Shiva Gopal Bajpai. 1978. *A Historical Atlas of South Asia.*

and peacetime-annexed areas are similar on observables.

To further address the possibility that areas annexed in wartime are systematically different than those annexed in peacetime, the exogeneity of European wars to annexation time will be tested in below, both by comparing the two types of areas on precolonial conditions and on variables that might affect annexation policy. Some of the important controls that have little effect of group wealth are the year of annexation, the political party in power in England, the fiscal situation of the East India Company, and the level of military conflict within India.

Problems of Identification

Even if European political events are exogenous to annexation policy in India, the assignment of Indian districts to wartime or peacetime annexation differs in several key respects from random assignment. Firstly, the time of annexation tends to be lumpily distributed in space, as the British annexed large tracts of territory at a time. The entire modern state of Bihar, for instance, was annexed at once in 1765. In this situation, not only will estimates of the effect of wartime annexation have inflated

standards errors, but the coefficients may be biased, since regions might have different internal distributions of wealth. To address this problem, all reported results cluster their standard errors at the district level, to account for the non-independence of observations within districts. Some models also include fixed effects for precolonial states, to control for differences in wealth across regions.

Secondly, even within regions, districts annexed at times of European war might differ from those annexed at other times, perhaps because European wars are correlated with some underlying spatial difference. This is a particular problem since European wars were more numerous in the earlier part of the period of imperial expansion. To address this concern, a later section discusses a series of comparisons of the two types of districts on unobservables. I will also show that the results are not driven by several other factors associated with the annexation process, including the period of annexation and the amount of conflict at annexation, and the partisan complexion of the British government.

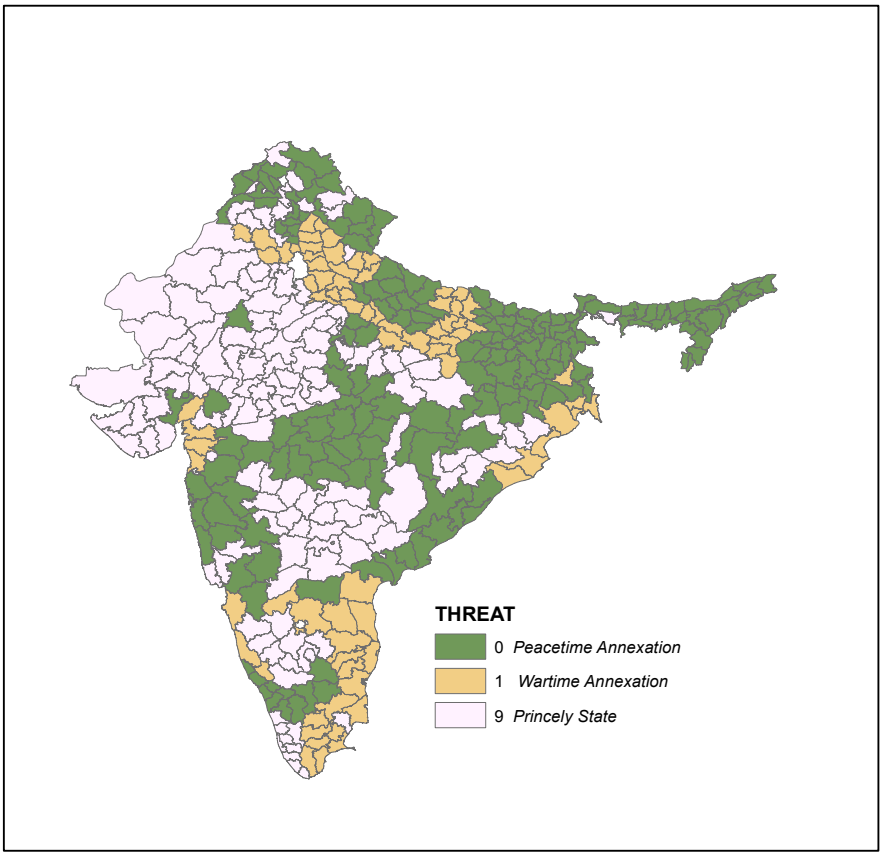
Thirdly, the treated group, the landed castes, varies significantly in nature from region to region. In some areas, such as the northern Hindi-speaking states, the landed castes are generally "twice born," with a high status within the Hindu caste hierarchy, while in other states the landed elite is composed of slightly less prestigious upper peasant groups. Similarly, in some areas, the landed castes take in a small portion of the population, while in other areas they include a substantial plurality, including many poor people. In a large sample where the independent variable is exogenous, this problem will be unimportant, since the cultural and economic differences among groups will tend to even out. However, the efficiency of this model can be improved by controlling for these differences. The major reported results include controls for the percentage of landed castes in the district and the interaction of that variable with a dummy for landed castes.

Balance

Were regions annexed in times of European war similar to regions annexed in times of European peace? Figure 4 shows the distribution of wartime-annexed districts relative to princely and peacetime-annexed districts. The princely states possess a

distinct spatial pattern, being concentrated in inland areas and in the west of the subcontinent. The relative distribution of annexation dates relative to European war is less distinct. On the one hand, the annexation of whole regions at the same time means that the distribution of wartime annexation is spatially clustered. On the other hand, these regional concentrations do not appear to be correlated with any of the superregional distinctions within India well-known to scholars, such as the distinction between north and south, and between zamindari and non-zamindari land tenure. Within states, the divisions between annexation dates are fairly arbitrary. We should thus expect the differences between the treated and non-treated samples to be minor after accounting for the lumpiness of the data.

Figure 4: Types of Annexation in India



Columns One, Two, Three and Four of Table A-2 shows the results of a series of balance regressions of precolonial observable variables across districts, with wartime annexation being the dependent variable, and the standard errors clustered by precolonial

states. Column One focuses on geographic and climatic variables such as the type of soil and the distance from the sea, Column Two focuses on economic and political variables such as the ethnicity of the precolonial ruler and the durability of their regime. Column Three focuses on indicators of the fiscal health of East India Company: its level of military expenditure, non-military expenditure, and land taxation. As expected, the level of military expenditure is higher in war-annexed areas than elsewhere, while other levels are similar. Column Four focuses on ex-post demographic variables such as the percentage of Muslims and members of scheduled castes and scheduled tribes in the population. Wartime and peacetime-annexed areas do not appear to differ substantially on any of these variables. The only statistically significant differences concern areas that changed native rulers between 1757 and 1857 (at the 10% level), and alluvial soils. Given the large number of variables in the specifications, the statistical significance of these variables may well not be causal. The online appendix shows that variation in these variables does not appear to be driving the reported results. These results underline that areas annexed in European wartime and European peacetime were relatively similar to each other at the time of annexation.

Historical Examples

Oudh

The quantitative results show that military threat was an important determinant of imperial policy, but fail to show what specific policy tools were used to favor or disfavor landed groups. Some of the more common ones, though difficult to measure, included the delegation or non-delegation of taxing authority, recruitment into the military and bureaucracy, and the setting of tax rates. In the case of the North Indian region of Oudh, however, we can see how the process worked with respect to one particular aspect of colonial policy with obvious economic importance: The direct confiscation of land from traditional elites for non-payment of taxes.

Oudh is a particularly useful comparison because it is a case where portions of the same precolonial state, which we would expect to be fairly similar to each other on unobservables, were annexed at different times. This meant that for a half century,

Table 6: Balance Regression: Logistic Regression on Wartime Annexation

LABELS	(1) Wartime Annexation	(2) Wartime Annexation	(3) Wartime Annexation	(4) Wartime Annexation
Black Soil	-0.808			
	(0.775)			
Aluvial Soil	1.083**			
	(0.480)			
Red Soil	-0.378			
	(0.712)			
Distance to Sea	-0.000616			
	(0.00197)			
Altitude	-0.000596			
	(0.00316)			
Steep Sloping Terrain	-88.68			
	(81.71)			
Sandy Soil	5.719			
	(14.82)			
Average Rainfall	-0.000995			
	(0.000869)			
Mean Temperature	-0.0581			
	(0.443)			
Cotton Weaving		0.460		
		(0.949)		
Silk Weaving		-0.278		
		(1.132)		
Muslim Ruler		1.216		
		(1.274)		
Maratha Ruler		0.542		
		(1.120)		
Change of Sovereignty		1.171*		
		(0.681)		
Treaty Date		-0.00415		
		(0.0206)		
EIC Military Spending			16.19**	
			(6.823)	
EIC Non-Military Spending			3.095	
			(8.842)	
EIC Land Revenue			-8.943	
			(6.907)	
Prop. Muslims in Sample				-0.999
				(1.802)
Prop. Sikhs in Sample				1.895
				(5.462)
Prop. SCs in Sample				0.644
				(1.927)
Prop. STs in Sample				-2.997
				(2.570)
Prop. Landed Castes in Sample				-4.899
				(3.729)
Prop. Agricultural Castes in Sample				-1.055
				(2.288)
Constant	2.112	5.232	-3.212	-0.112
	(12.93)	(37.44)	(5.622)	(0.738)
Observations	204	249	240	249

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

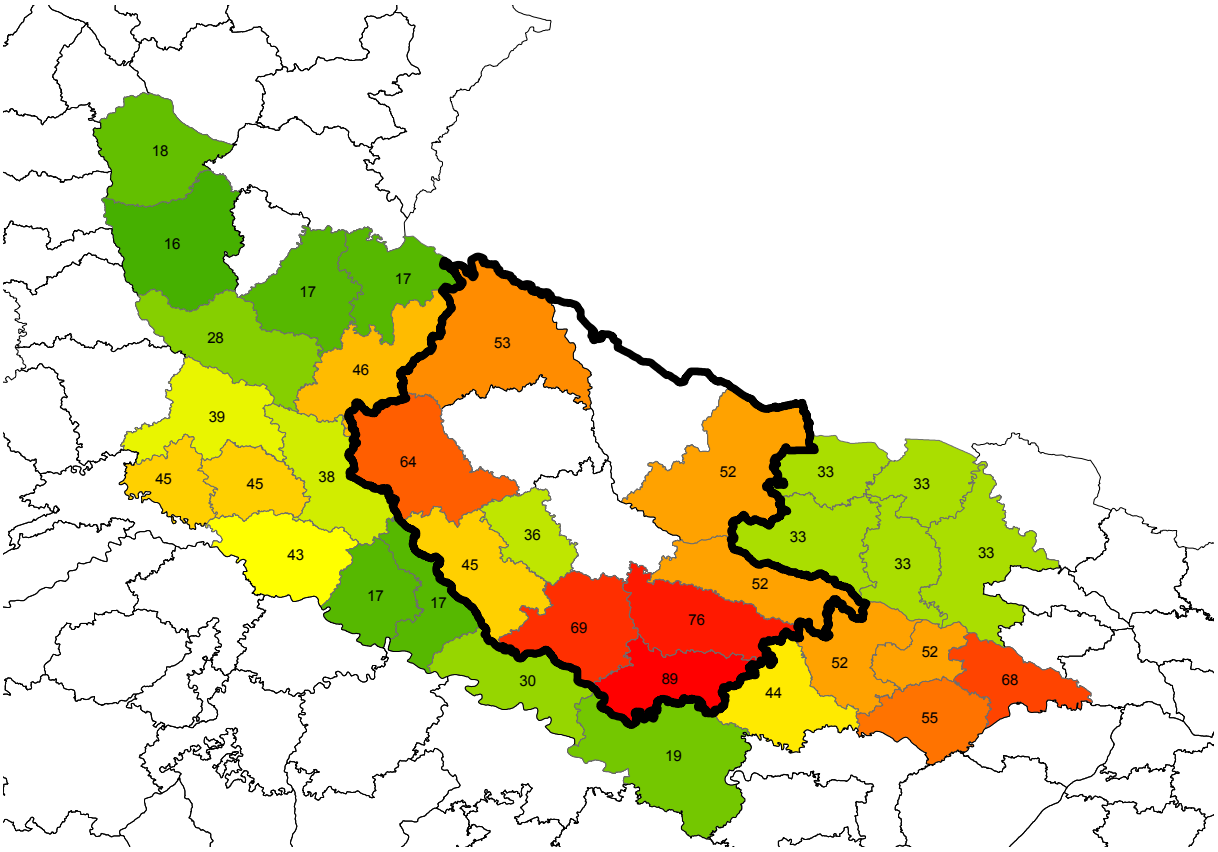
Note:This is a logistic regression with wartime annexations as the dependent variable and the district as the unit of observation. The standard errors are clustered by precolonial states.

numerous districts of princely Oudh immediately neighbored districts of British India, though they had had similar political institutions in the 18th century. These districts, only separated by a river, are part of the same ecological zone and had similar historical experiences.

The Nawabs of Oudh ruled a large area of Northern India in the late 18th century, but their ability to conduct autonomous policy was gradually weakened by the British. This process culminated in 1801, when the larger half of the Nawabs dominions were ceded to the British (the "ceded provinces.") As Figure 5 shows, the ceded provinces encircled the territory that remained under nawabi control. In 1856, the British annexed the remainder of Oudh. It is worth examining the substantial changes in the political situation that had occurred since 1801. In 1801, Britain was fighting a lonely struggle against Napoleonic France, which had forced it (in 1797) to suspend payments in gold, and (in 1799) to introduce Europe's first income tax. In India, the East India Company was still one player among many, and was still bracing for a confrontation with the Maratha confederacy. In 1856, by contrast, the British had just defeated Russia in the Crimean War, and over the past half century had either annexed or reduced to impotence all the major Indian powers. In Britain itself, industrialization, still confined to textiles in 1801, had made Britain the world's leading economic power.

These different policy imperatives produced very different attitudes towards the landed castes of Oudh. In the ceded provinces, the colonial state ruthlessly eliminated much of the former higher aristocracy, who were regarded as useless and dangerous. This was not accomplished without violence, and some of the recalcitrant landlords saw their mud forts besieged and taken by the company's artillery. Even the larger peasant proprietors, however, suffered from the terms of a series of harsh and inflexibly implemented land tax settlements. In many cases peasant communities were forced into debt to both the state and urban moneylenders, with the long term result that many lost their land, often by court-ordered sales.[43] The same result could be seen in the administrative sphere, where the establishment of company courts and police both deprived local elites of profitable offices that they had held under the Nawabs but opened up a smaller set of opportunities for urban professionals. The result was something of a social revolution in Oudh. As Metcalf remarks:

Figure 5: Percentage of Land Owned by Landholding Castes In Oudh, c.1900



Note:The colored districts were part of Oudh in 1801. The black line is the boundary between Oudh and British India from 1801 to 1856. The numbers for each district represent the percentage of land owned by Rajputs, Bhumihars and Jats at the settlement closest to 1900. ***Source:*** Land Settlement Reports, various years.

> By the mid-nineteenth century the face of society in the Doab, once hardly distinguishable from Oudh, bore little resemblance to its neighbor across the Ganges...
>
> Many old landholding families were permanently reduced in influence...In their place, and sometimes beside them, rose up new landholding groups—often absentee, city-based or of commercial or service castes.[44]

In Oudh proper, by contrast, the British adopted a policy that strongly favored existing landed groups, and confiscations modest relative to the Doab, though some higher landowners with inadequate title did lose their estates and privileges, a policy that created considerable local resentment. Even after many traditional landed elites had joined the 1857 rebellion, loyal landowners were restored to their lands and even parts of their judicial responsibilities.[45] More generally, the so called "Oudh Policy" aimed at avoiding disruptions in rural social relations, and emphasized established

landed groups (both big and small) and easy tax assessments.

The results were obvious even in the late colonial period. Figure 5 shows the percentage of land in Oudh owned by the three dominant landed castes of the region, the Rajputs, Bhumihars, and Jats. This figure is based on an original dataset of caste landholding patterns, itself based on colonial land settlement reports for the period around 1900.

In general, districts of pre-1856 Oudh show much higher levels of landed caste landholding than neighboring districts, which had identical political conditions both before 1801 and after 1856. Some of these contrasts are dramatic. In Pratapgarh, 89% of the land in 1900 was owned by landed castes, while just across the river in Allahabad, landed castes owned only 19% of the land. In Allahabad, as in other districts, much of the difference (31.8%) was made up by urban professional castes.

The relationship between colonial-era policy and the poor economic position of the landed castes in Oudh can be shown even more directly by comparing the relationship between court-ordered sales of land and the percentage of land owned by landed castes in UP districts in 1900. Court-ordered land sales have a large negative effect on landed caste land ownership (χ^2=-0.38.) Even in a very small sample (n=31) this correlation is statistically significant at the 5% level. As the historical record would lead us to expect, wartime annexation is also robustly correlated with court ordered sales, with the association statistically significant at the 1% level.

Bengal vs. Punjab

If Oudh shows how similar areas could diverge, the contrast between the elite strengthening and elite-weakening types of colonialism can be seen even more clearly by comparing Bengal and Punjab, two cases annexed at very different periods of the annexation process. Bengal, mostly annexed during the Seven Years war, is widely regarded as being an extreme and enduring case of colonialism redistribution towards non-landed groups. Punjab, annexed during the long peace of the 1840s, is widely regarded as experiencing colonial policies blatantly biased towards the landed castes.

Bengal was the first part of India conquered by the British. Annexation was a gradual process, but most of the province was annexed by the company during the

1750s. This coincided with the Seven Years War in Europe, which was paralleled by a full dress conflict between the British and French in South India, and a vicious proxy war for influence within Bengal. During these early years of British rule, their military position was highly insecure—at the start of the war, Calcutta had been besieged and taken by the Nawab. This insecurity may explain the ruthless attitude that the British adopted towards the traditional landed groups

As in other parts of Eastern India, the British implemented a land tenure regime that granted proprietary rights to large landlords. However Bengal stood apart from other parts of the East such as Bihar, in the highness of the tax demand, and the ruthlessness and inflexibility with which it was implemented. The combination of high and inflexible demands and unpredictable harvest was bankruptcy for the Muslim and Rajput landlords of Bengal, the late 18th century saw the expropriation of virtually every major landowner by court order.[46] Their replacements were often from traditionally non-landed groups such as the Brahmans and Kayasths, who used wealth earned in trade with the British to buy estates.

The other mechanism by which these non-landed groups gained influence was through the rapidly expanding colonial administration. Unlike their urban competitors, traditional landlords found it difficult to adjust to the demands of the colonial bureaucracy, which valued literacy over descent or military prowess. Unlike in other parts of India, the colonial state made little attempt to accommodate them. The results were clear: According to the 1911 census, members of the urban literate castes (Brahnims, Kayasths, and Baidyas) made up 83.7% of the gazetted civil servants in Bengal, and 54.6% of police and army officers. These non-landed upper castes, the bhadralok, also took on a dominant, and enduring role in the cultural life of the province.[47]

Punjab, annexed in 1846, was the last major independent power in India, and was annexed at the height of British power worldwide. While the British had had to fight a stiff battle to destroy the Sikh Kingdom, they quickly lost any fear they may have had of the Sikhs, and in fact during the 1857 rebellion came to view them as a useful bulwark against the recalcitrant elites of other areas of India. The trust extended so far that Punjabis came to dominate the colonial army. In this context, the British developed a set of stereotypes (the “martial races” theory) that emphasized the racial

superiority of Punjabis over other groups[48]

For these reasons, the pro-peasant turn in British policy in the late 19th century was most pronounced in the Punjab, where the landholding groups were able to maintain some of their traditional political power even within the context of direct rule. In this province the British established a system of administration, the "Punjab System," that deemphasized formal institutions in favor of the informal ones of Sikh and Jat peasant communities and individual relationships with British officials.[49] Not only was the colonial state small, but it was also not dominated by the urban castes: In 1911, Brahmans comprised 38.9% of the educated professionals in UP, but only 5.9% in Punjab.

British favoritism towards landholding groups culminated in the Punjab Alienation of Land Act (1901). Motivated by the fear that urban groups were acquiring too much economic power, the act banned the transfer of land to members of groups defined as non-agricultural.[50] This was coupled with a massive investment in irrigation, which made the Punjab the most agriculturally dynamic part of India in the late colonial period, and immensely strengthened the social position of the Jats and Sikhs, the largest peasant groups.

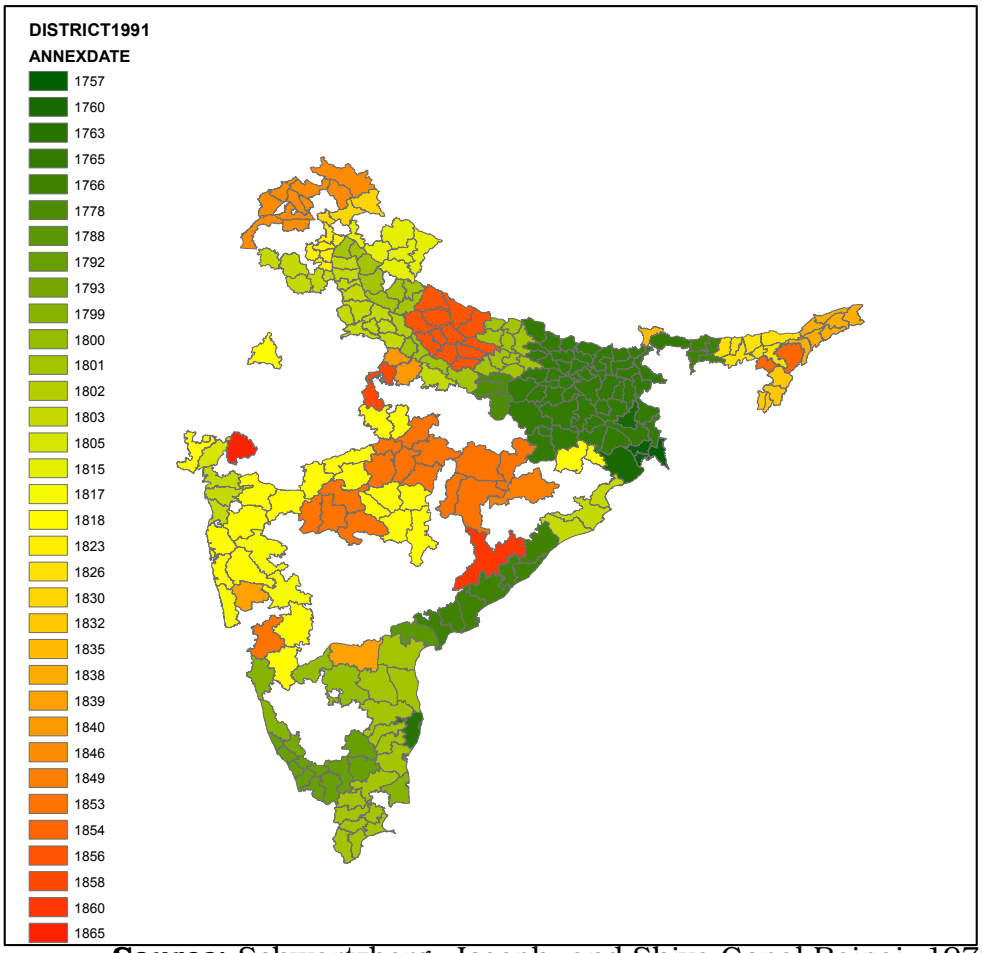
Alternative Explanations

This section examines several alternative explanations for the findings in Table 2. For reasons for space, many of the statistical results to which this section refers are reported in an online appendix.

Time of Annexation

The most obvious alternative explanation for the results in Table 2 is that they are the result of the progression of time. Although European wars occurred throughout the 1756-1865 period, the period between Waterloo and the last annexation in 1865 was one of peace, with only the brief Crimean war intervening. In addition, the first major annexations in India, in coastal Bengal, occurred during the Seven Years War. As a result, areas annexed in wartime were annexed an average of fourteen years earlier

Figure 6: Dates of Annexation of Indian Districts



Source: Schwartzberg, Joseph, and Shiva Gopal Bajpai. 1978.

than groups annexed in peacetime. The effect of military threat might thus be an artifact of some aspect of historical change, such as cultural attitudes in Britain, or ideological attitudes toward Indians. In addition, the date of annexation might be associated with some unobservable attribute of the territory itself. This possibility is clear from Figure 6, which shows dates of annexation for directly-ruled India districts. The first areas annexed were generally low-lying and in the East of the subcontinent, while those annexed later tended to be in the center and in mountainous areas.

Table A.2 tests the effect of chronology on social outcomes. Models One includes the date of annexation and its interaction with the landed caste variable. The estimated effect of wartime annexation on landed groups decreases in magnitude, though it is still statistically significant at the 10% level. Model Two uses a non-linear measure

of the date of annexation, including dummy variables for pre-1770 and post-1820 annexation, dates which reflect natural breaks in the data. The effect of wartime annexation remains statistically significant and negative. Similar results hold if we control for annexation during the Napoleonic Wars (1793-1815) or annexation during the long peace after these wars ended (Models 5 and 6 of Table A.2).

These results echo the raw data on annexation dates, shown as Table 7. No matter whether annexation was early or late chronologically, areas annexed in wartime tend to have a larger landed caste economic advantage. In particular, those landed groups annexed in the 1764-77 period of peace have a .36 higher wealth advantage than those annexed just a few years before during the Seven Years War. Landed groups whose district was annexed in 1816-53 have a .47 higher wealth advantage than those annexed during the Napoleonic Wars.

Table 7: Wealth by Annexation Date and Caste in India

	Annexation Date									
	1757-63	1764-77	1778-83	1783-92	1793-01	1802	1803-15	1816-53	1854-6	1856-65
European War	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*
Non-Landed	0.31 (1.03) n=4429	-0.60 (0.77) n=9352	-0.21 (1.00) n=438	0.05 (0.83) n=2375	-0.32 (0.84) n=6566	-0.41 (1.02) n=108	-0.06 (0.98) n=5542	0.21 (1.04) n=15542	-0.40 (0.72) n=65	-0.66 (0.84) n=2603
Landed	0.40 (0.67) n=40	-0.15 (0.88) n=448	0.92 (1.22) n=11	0.47 (0.85) n=107	-0.24 (0.90) n=199	-0.25 (0.90) n=17	-0.28 (0.85) n=888	0.46 (0.89) n=2315	 n=0	-0.23 (1.01) n=165

Note:N represents the sum number of survey observations in each category, and standard errors are in parentheses. As explained in Section 5.4, these observations are collapsed to the district-jati level in the main analysis. ***Source:*** India National Family Health Survey 1998-9. See text.

War in India

Another possible explanation for these results is that the effect we observe of European wars actually reflects military conditions in India, and the actual willingness of indigenous elites to resist the British. In this formulation, colonial perceptions of military threat are influenced by whether the Company was fighting a war in India, rather than the enhanced threat resulting from these enemies being cobelligerent with European powers. As we have seen, this is unlikely to alter the main results given that military conflict was endemic in colonial India (72% of Indian districts were forcibly conquered, and an identical 72% were annexed in a year the company was fighting a war somewhere

in India) and that the few peaceful years are uncorrelated with European conflicts. Nevertheless, this hypothesis is tested in Table A.2.

Model Three includes controls for the existence of conflict in India as a whole, and Model Four controls for indigenous resistance to British Conquest. Consistent with the theoretical expectation, the interactions of both these variables with landedness are statistically significant (at the 10% level) indicating that the linkage between military conflict and elite impoverishment works for Indian conflicts as well as European ones. However, the inclusion of these variables does not change the effect of European Conflicts on landed groups. This is not unsurprising. While conflict with indigenous powers was very common and mildly concerning, it was external conflict and external aid that made these conflicts much more threatening.

British Government and Finance

One potential concern is that European war and the relative social position of landed castes are spuriously related due to the existence of different schools of policymaking in British politics. An "aggressive" ministry, in this view, would be ideologically inclined both to become involved in European wars and to adopt aggressive policies towards Indian elites. This concern is particularly troubling because during periods of European war, England was governed primarily by the Tory party–indeed the wars of the 18th century were a key issue in the evolution of the English party system. Models One and Two of Table A.3 test this hypothesis. Model One examines whether controlling for Tory Party government reduces the effect of wartime annexation (with Whig and coalition governments as the excluded category.) Model Two examines the effect of "aggressive" ministries, coded as those that were in power at the onset of a European war. The effect of wartime annexation on landed castes remains statically significant and negative, after the inclusion of these controls. The coefficient of the interaction of the cabinet variables with caste landedness has a value close to zero, indicating that cabinet composition has little direct redistributive impact.

One of the predictions of the theory was that financial pressure on the colonial government might be one of the mechanisms by which European conflict influences colonial policy. It might be, however, that fiscal constraints influence policy independent

of European conflict. Models Three and Four of Table A.3 Test this hypothesis. Model Three includes controls for the total levels of EIC spending and military spending, normalized by revenue. This captures the idea that colonial policy might change relative to fiscal needs, with the state trying to increase revenue and increase expenditure. Models Four controls for the level of land revenue relative to total revenue. This accounts for the possibility that the results are driven by the Company's gradual shift from dependence on land revenue to dependence on other types of taxation, which might affect their policy towards landed groups. While the fiscal measures are correlated with district-level levels of wealth, they do not seem to have any substantial effect on the relative position of landed and non-landed castes. More importantly, their inclusion does not alter the negative effect of wartime annexation on landed castes.

Alternative Specifications

Table A.4 tests whether the results are robust to the use of alternative strategies for coding the key variables and organizing the analysis. Model One includes controls for the date at which a precolonial state signed a subsidiary treaty with the British (usually earlier than the date of annexation). Its inclusion does not alter the effect of wartime annexation.

Models Two and Three changes the unit of observation from the district caste category to the district. Model Two tests a simple form of this hypothesis, comparing landed castes in areas annexed at times of European war to landed castes in areas annexed at times of European peace. Landed castes in the peacetime-annexed areas are significantly better off than their coethnics elsewhere, with the average landed district-jati having a quarter of a standard deviation higher wealth in a peacetime-annexed area than in a wartime-annexed area. Model Three takes as its dependent variable the district-level differences between landed and non-landed castes. Wartime annexation is a strong negative predictor of these differences, with the economic advantage of landed castes being much smaller in wartime annexed areas than elsewhere.

The use of the district-caste category as the unit of observation ignores the clustered design used in the collection of the individual data. Model Four reruns the basic model using the full dataset, with the individual as the unit of observation. In this model, the

standard errors are clustered by survey cluster, and weighted by the original survey weights. The results in this model are virtually unchanged from thus in Table 2, indicating that the results are uninfluenced by the choice of the unit of observation. Model Five further develop this by using the district-jati as the unit of observation, again without effect on the results.

Robustness Checks

Table A.5 examines whether the effects in Table 2 are being driven by a particular subsection of the data, or by some form of bias. Model One include fixed effects for modern states. It excludes the modern states that have no areas annexed at time of war, which include Rajasthan, Maharashtra, Kerala, Punjab, Madhya Pradesh and Bihar, since in these regions in which there were no-treated areas, it is impossible to identify within-state effects. Despite the smaller sample size, the estimates effects of wartime annexation are still statistically significant and negative, echoing the results in Table 2. These results can also be replicated using fixed effects for colonial provinces (not reported).

It is possible that the observed differences in landed caste status are a product of the fact that two of the three main port cities of colonial India, Calcutta and Madras, were annexed at times of European war, and (like the third major city, Bombay) have very high levels of wealth. Model Two of Table A.5 excludes these three cities. The effect of wartime annexation is still statistically significant and negative in this model.

One implicit assumption of the attempt to measure direct effects of the colonial period in the 1990s is that there have been no major social changes in the intervening period to move groups from one place to another, or to fundamentally alter the economic status of landholding groups. The one event in South Asian history that might fit these criteria is the 1947 partition of India, which resulted in widespread population movements to and from Pakistan. Model Three of Table A.5 accounts for this possibility by excluding the states of Punjab, Haryana and West Bengal, the areas most affected by the flow of refugees. The effect of wartime annexation is virtually identical with the exclusion of these areas, indicating that the effect of partition, or any other element of the political economy of these states, on the main results was minimal.

Another source of bias is the economic growth that transformed some areas of India in the late 20th century. Model Four includes control for the absolute level of poverty in 1970s India and its change over the next two decades. Neither of these variables has a significant effect on groups wealth, and their inclusion does not substantively change the relationship between landed group wealth and wartime annexation

The definitions of precolonial state used in these models are based on the status quo in a single year, 1756. However, 18th century Indian politics was very unstable, and in many cases the ruling dynasty in 1756 was different from that ruling at the time of annexation. Model Five of Table A.5 excludes areas in which the polity controlling the area at the time it fell within the British sphere of influence was different from that controlling the area in 1756. In areas where control of the state was shifting, we might expect the connection between the landholding elite and the power structure to be weaker, or at least more complicated. However, excluding these areas appears to somewhat increase the estimated negative effect of wartime annexation on landed groups.

Alternative Definitions of Caste

Could the results be distorted by the presence of religious minorities, whose relationship to the caste categories used in the analysis is at times antagonistic?[51] In particular, could missionary-induced conversion to Christianity be driving variation in the socio-economic status of groups, as it appears to do for some African groups? Model Two of Table A.6 excludes non-Hindus, with little effect on the results.

Even if units are taken as constant, the membership of groups is not, as individuals opportunistically recatagorize themselves into higher castes.[52] There is some reason to think that these movements may cause us too substantially underestimate the effect of colonial redistribution. If colonial resources tended to flow to a particular groups, this would create an incentive for poor individuals to join these groups, thus lowering both their average wealth and the estimated redistributive effect of colonialism.[53]

Model One of Table A.6 examines the effect of these changes, using a unique panel dataset of population changes of Indian groups in the colonial era [54] It includes as a control variable the proportional change in a caste's population between the 1901 and

1931 censuses. The inclusion of this variable does not change the effect of wartime annexation. The direct of effect of caste population growth, however, is statistically significant and negative, confirming that cross caste movement tends to make rich groups appear poorer

Land Tenure

One well-known difference between the regions of India is in the land tenure systems adapted by the British. In certain areas of India, particularly those colonized before the 1790s, the British established a system known as zamindari tenure, in which the right to pay land revenue, and by extension property rights in land, were transferred to landlords and politically-connected elites. In other areas of India, they adapted two alternative systems, village-based (in which the revenue was the responsibility of the cultivators within each village jointly), and ryotwari (in which the cultivators paid their share directly to the state). The differences among these systems have been posited as a source of regional inequality in India, and as a cause of the enrichment of rural elites.[55]

Models One and Two of Table A.7 examine whether the wartime annexation is purely an effect of land tenure systems, including as a control the percentage of land farmed by landlords (taken from Banerjee and Iyer's data) and it's interaction with the landed caste variable. Consistent with Banerjee and Iyer's findings, the direct effect of zamindari tenure is substantial and negative, though landlord tenure does not appear to affect the relative standing of landed and non-landed castes, or to change the effect of wartime annexation. This is also true in Model Two, where the sample is confined to districts where over 30% of the land was cultivated by landlords.

This non-effect of land tenure systems on caste inequalities seems less strange when we examine how zamindari tenure actually worked, and the great variation in the way land tenure systems implement. In particular, there was substantial variation both across areas and across time in the tax rates the British imposed on zamindars and their willingness to use the legal process to evict non-paying tenants. Where tax rates were low and the eviction process rarely used, colonialism could have a profoundly conservative effect, strengthening the hold of rural landlords. Where tax

rates were high and eviction common, colonialism could affect a revolution in land tenure, replacing established local families with urban elites, often closely associated with the colonial state[56]. These differences in implementation, driven by the colonial state's need to conciliate local elites, could thus be far more significant than differences in the legal and institutional setting.

Martial Races

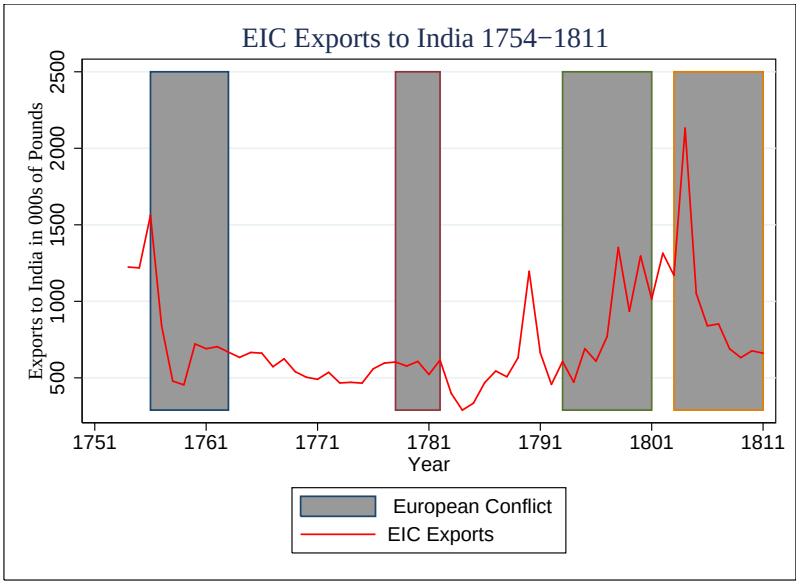
In the late 19th century, the British concentrated their military recruitment, which had previously drawn on a fairly broad section of the landed castes, on a few groups thought to possess martial virtues, including loyalty to the Empire. These groups, notably Jats, Rajputs, Gurkhas and Sikhs, have been thought to have received substantial social benefits from their service. This very conscious favoritism tends to support rather than the weaken the theory developed in above, since the favored groups tended to be landed elites in areas that were annexed late in colonial history or were never annexed at all. The most long-lasting example of such favoritism, the Gurkhas, came from outside India entirely. While favoritism towards the martial races tends to demonstrate the theory rather than refute it, it is interesting to see if the differences we observe in the wealth of landed groups is a function of this specific type of colonial favoritism. Model Three of Table A.7 includes a binary variable of martial groups, defined as groups that had more than ten companies of infantry from that group in the Indian Army in 1922. While "martial" status appears to be associated with higher levels of wealth in 1998, its inclusion does not alter the effect of military threat at the time of annexation.

Revenue and Resources

It is possible that colonial policy was determined as much by the resources available in the territory as by its level of military threat. While these differences should be neutralized in a large sample, it is possible that colonial economic development was associated with times of war. This does not appear to be the case in Figure 7, which shows East India Company exports to India relative to periods of European war. The

trend of exports seem unrelated to European conflict, with substantial peaks and troughs in both periods.

Figure 7: East India Company Exports to India by Year



Source: House of Commons Parliamentary Papers. 1812-13 (152) "An account of bullion and merchandize exported by the East India Company to India and China respectively, from 1708 to the latest period; distinguishing each year, and the several presidencies: with a statement of the mode in which the value of the merchandize is calculated."

Model Four of Table A.7 tests the hypothesis that the level of resources in a territory effects the advantage of the landed castes. It includes a dummy for whether a territory produced one of the four major goods demanded by the East India Company in the 18th century, woven cotton, woven silk, saltpeter and pepper, taken from Chaudhuri.[57] The production of export goods in the precolonial era appears to have little effect on outcomes in the modern era, and to have no effect on the variables of interest. Similarly, the effect of colonial annexation is robust to the inclusion of measures of regional soil quality (Model Five). This assures us the that results are not being driven by the presence of alluvial soils, the only significant difference between the war and peacetime annexed areas in the balance tests.

Inequality

While the main effects in Table 2 focused on the level of intergroup inequality, it is possible that the effect of wartime annexation was to widen social inequality in general, rather than changing the status of landed groups specifically. While the general level of inequality is obviously correlated with both intergroup inequality and the general economic conditions of an area, it is worth examining if it is driving the results. Model Six of Table A.7 examines whether the districts level of inequality, as measured by the standard deviation of wealth, affects the results. While inequality is positively correlated with wealth (as growth theory would predict) the inclusion of this variable does not affect the relationship between wartime annexation and inter-group differences in wealth.

Alternative Definitions of Precolonial Elite Status

The main models defined "landed castes" based on the 1911 census of India. This might be problematic, due to the fissiparous nature of caste status and the close relationship between colonial caste categorization and colonial ethnic favoritism. However, Table A.8 shows that the main results are robust to a wide variety of different ways of defining an elite caste. Model One includes groups that were coded as "agricultural" rather than "land-owning" at the 1911 Census. Model Two defines landed castes as those who had an members ruling an Indian polity in 1756. Model Three confines landed caste status to Rajputs and Marathas, two warrior groups who were by far the most politically important non-Muslim ethnicities in precolonial India. Notably the effect sizes in this highly restrictive definition are quite large, larger even than those in the main results. Model Four uses a very open definition–all "upper castes" (not receiving affirmative action benefits in 1998) are defined as landed. The fact that these alternative definitions produce such similar results gives us some confidence that the main results are not being driven by the unit of analysis.

Conclusion

The data presented in the last few sections displays a few simple patterns. Geopolitical patterns at the time of colonization, in particular the level of military and fiscal pressure on the colonial power, are associated with differences in the socioeconomic status of groups. In areas where the colonial institutions were created under the threat of a military challenge sponsored by a rival European power, powerful landed groups suffer a dramatic reversal of fortune, becoming poor relative to both their former political inferiors and their coethnics in other regions. In areas annexed in peacetime, precolonial elites were able to maintain their economic status relatively comfortably. This difference in the persistence of precolonial patterns was already evident in the late colonial period.

The redistribution of wealth that began under colonialism would have long-term consequences for the politics of India. In areas where landed groups were dominant, they have tended to dominate post-independence politics, leading to a set of policies that benefit rural groups and often neglect lower status social groups. Challenges to the power of the landed class have tended to be either very weak or highly confrontational in tone. In areas where urban elites were economically strong, such as West Bengal, politics has tended to be more redistributive in tone.

These results have obvious implications for students of the politics of other parts of the developing world where intergroup differences in wealth are traced to colonial policy, such as Nigeria, Malaysia, Indonesia, and the Sudan. At a minimum, they offer an explanation for why some groups tended to benefit from colonialism more than others, and why colonialism in some places had socially revolutionary effects. They also contribute to the larger literature on colonialism, by showing that the distributional consequences of colonialism can be just as substantive and long-lasting as the institutional ones so commonly discussed in the literature. Finally, it suggests an interesting, and largely unstudied, set of questions on causes of policy variation within colonial regimes and the strategic choices made by colonial rulers, showing that the incentives of these rulers are not just influential, but changeable. They demonstrate what 19th century observers first suspected: That colonialism was deeply entangled with the inter-state

rivalries of Europe, and should be studied in the context of global political conflict.

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Notes

[1]Acemoglu, Daron, Simon Johnson, and James Robinson. 2002. "Reversal of fortune." *The Quarterly Journal of Economics* 117.4: 1231-1294. Acemoglu, Daron, Simon Johnson, and James Robinson. "The Colonial Origins of Comparative Development" *American Economic Review.* Mahoney, James. 2010. *Colonialism and Postcolonial Development* Cambridge UP. Lee, Alexander and Kenneth Schultz. 2012. "Comparing British and French Colonial Legacies" *Quarterly Journal of Political Science,* 7: 1-46. Banerjee, Abhijit and Lakshmi Iyer. 2005. "History, Institutions and Economic Performance" *American Economic Review.* 95 (4): 1190-1213. Nunn, Nathan. 2009. "The importance of history for economic development." NBER. w14899.

[2]Iyer, Lakshmi. (2010) "Direct versus indirect colonial rule in India: Long-term consequences.' *'The Review of Economics and Statistics* 92.4 : 693-713. Lange, Matthew. *Lineages of despotism and development: British colonialism and state power.* University of Chicago Press, 2009. Wucherpfennig, Julian, and Lars-Erik Cederman. "Who Inherits the State? Colonial Rule and Post-Colonial Conflict." APSA Meeting Paper (2012).

[3]Acemoglu, Johnson and Robinson, "Reversal of fortune," 2002

[4]Horowitz, David. 1985.*Ethnic Groups in Conflict.* Cambridge: Cambridge UP.

[5]Acemoglu, Daron, and James A. Robinson. "Persistence of power, elites, and institutions." *The American Economic Review* 98.1 (2008): 267-293.

[6]Metcalf, Thomas R. "Landlords without land: the UP zamindars today." *Pacific Affairs* 40.1/2 (1967): 5-18.

[7]Calculated based on the NFHS data discussed below.

[8]Srinivas. M.N. 1966. *Social Change in Modern India.* Berkeley: University of California Press. Frankel, Francine. and M.S.A. Rao. 1989. Eds. *Dominance and state power in modern India* Delhi: Oxford UP.

[9]Engerman, Stanley and Kenneth Sokoloff. 1998. "Factor Endowments, Inequality, and Paths of Development Among New World Economies." NBER Working Paper 9259.

[10]Streets, Heather. 2004. ' *Martial Races* Manchester UP.

[11]This paper concerns the distributional consequences of colonialism among indigenous populations, and why certain groups benefited from colonialism more than others. It thus cannot explain conditions in areas where there was only a small surviving precolonial population.

[12]In many societies, particularly those comprised of hunter gatherers, internal social and political stratification is modest (Ertan, Ahran. and Louis Putterman. 2007. "Determinants and Economic Consequences of Colonization." Econometric Society conference paper.) and in these societies it is impossible to examine the redistributive effects of colonialism.

[13]Shleifer, Andrei, and Robert W. Vishny. *The grabbing hand: Government pathologies and their cures.* Harvard University Press, 2002.

[14]Yapp, Malcolm. 1987 "British perceptions of the Russian threat to India." *Modern Asian Studies.* 21.4: 647-665.

[15]In addition to external aid, numerous other factors might influence the relative military capabilities of the colonizing power and the indigenous elite, including the time of colonization, the size of the European state and the institutional development of the indigenous polity.

[16]Metcalf, Thomas. 1979. *Land, landlords, and the British Raj*. University of California Press.

[17]Furnivall, John. 1948. *Colonial policy and practice* CUP Archive.

[18]Iyer, Lakshmi. (2010) "Direct versus indirect colonial rule in India: Long-term consequences.' Gerring, John, et al. "An institutional theory of direct and indirect rule." (2011): 377-433. Lange, Matthew. Lee, Alexander and Kenneth Schultz. 2012. "Comparing British and French Colonial Legacies" *Quarterly Journal of Political Science,* 7: 1-46.

[19]Metcalf, Thomas R. "Landlords without land". 1967. Joshi, Puran Chandra. "Land reform and Agrarian change in India and Pakistan since 1947: 1." (**?**) 1.2 (1974): 164-185.

[20]Anderson, Siwan, Patrick Francois, and Ashok Kotwal. "Clientelism in Indian villages." *The American Economic Review* 105.6 (2015): 1780-1816.

[21]Shah, Ghanshyam. *Untouchability in rural India*. Sage.

[22]Bidwell, Shelford. 1971. *Swords for hire* London: J. Murray.

[23]Forrest, Denys Mostyn. *Tiger of Mysore: The life and death of Tipu Sultan.* Chatto and Windus, 1970.

[24]Forrest, George,. *Selections From the Letters, Despatches and Other State Papers Preserved In the Foreign Department of the Government of India, 1772-1785.* Vol. II. Calcutta: Government Printing, 1890. P.632

[25]Chandra, Satish. 1982. "The Standard of Living: The Mughal Empire." In Raychaudhuri, Tapan, and Irfan Habib. *The Cambridge Economic History of India.* Cambridge. p.458-71. Fukazawa, H. 1982."The Standard of Living: South India." In Raychaudhuri, Tapan, and Irfan Habib. *The Cambridge Economic History of India.* Cambridge: Cambridge UP. p.471-477.

[26]Kolff, D.H.A. 1990. *Naukar, Rajput, and Sepoy* Cambridge: Cambridge University Press.

[27]Districts are also the level at which spatial assignment was made, since information on location is not available below this level.

[28]These areas were either not colonized by Britain, were developed in the 20th century, or are border regions with long histories of civil conflict.

[29]Annexation years and state boundaries were coded based on *A Historical Atlas of South Asia.* (Schwartzberg, Joseph, and Shiva Gopal Bajpai. 1978. Chicago: University of Chicago Press.) and Dodwell, H.H. 1922. *British India.* V.5. of Rapson, E.J, ed. *The Cambridge History of India.* Cambridge: University Press.

[30]Jati is self-reported in the 1998 National Family Health survey. Individuals reported thousands of spelling variants and local titles, which were recoded as the main caste.

[31]Dirks, Nicholas. 2002. *Castes of Mind* Princeton University Press. Lee. 2013. "Caste Mobilization in Colonial India." Working Paper.

[32]The analysis assigns district-castes to historical conditions based on their district of residence at the time of the survey. Obviously, individuals or their ancestors might have moved since the 18th century. However, previous studies have tended to assume that overall stability in regional populations is a realistic assumption in India (Banerjee and Somanathan. 2007). Moreover, such movement would tend to bias towards a null result.

[33]This round of the NFHS was chosen because it is the most recent to include information on the home district of respondents.

[34]See Table A.1 for details of samples sizes and standard errors.

[35]See Equation One.

[36]Meillassoux, Claude. *L'esclavage en Afrique précoloniale.* Paris: F. Maspero, 1975.

[37]The wealth of upper caste non-landed groups, such as Brahmans and Kayasths, is slightly higher in wartime annexed areas, but this difference is not statistically significant.

[38]Gerring, John, et al. "An institutional theory of direct and indirect rule." 2011, Iyer, Lakshmi. "Direct versus indirect colonial rule in India: Long-term consequences.' Lange, Matthew. *Lineages of despotism and development: British colonialism and state power.* University of Chicago Press, 2009.

[39]Hibbert, Christopher. *The great mutiny, India 1857.* Lane, Allen, 1978.

[40]Schwartzenburg and Bajpai *A Historical Atlas of South Asia.* 1978

[41]Of the 110 years from 1756 to 1865 (when the last part of British India was annexed) 36 were periods of European war.

[42]Mukherjee (Mukherjee, Shivaji. 2013. "Colonial Origins of Maoist Insurgency in India." APSA meeting.) argues that the British were less likely to annex frontier districts at times of European War. This does not appear to be confirmed by the data, given the high pace of annexation in war and the fact that frontier districts have a lower probability of annexation at all times. Even if this suggestion is correct, however, it would not necessarily follow that areas annexed in European wartime are distinct in their social characteristics from those annexed in peacetime.

[43]Metcalf, Thomas. 1979. *Land, landlords, and the British Raj*.

[44]Metcalf, Thomas. 1979. *Land, landlords, and the British Raj*: 104, 135

[45]Stokes, Eric. 1978.*The Peasant and the Raj* Cambridge: Cambridge UP.

[46]Marshall, Peter James. 1976. *East Indian fortunes: the British in Bengal in the eighteenth century.* Oxford: Clarendon Press.

[47]Government of India. Census of India 1911. Calcutta, 1911.

[48]Streets, Heather. 2004. ' *Martial Races* Manchester UP.

[49]Yong, Tan Tai. 2005.*The Garrison State* Delhi: SAGE Publications.

[50]Cassan, Guilhem. 2010. British law and caste identity manipulation in colonial India: the Punjab Alienation of Land Act. Indian Statistical Institute Conference Paper. 2010.

[51]At the NFHS, some members of religious minorities reported their caste, while others reported their religion. The later choice was coded as non-landed in the main analysis.

[52]Rao, Vijayendra, and Radu Ban. "The political construction of caste in South India." Processed. Washingon DC: the World Bank (2007).7; Cassan, Guilhem. 2010. British law and caste identity manipulation in colonial India: the Punjab Alienation of Land Act. Indian Statistical Institute Conference Paper. 2010.

[53]Consistent with this theory, the landed caste category is slightly higher in war-annexed than in peace annexed areas.

[54]For a further description of this data, which is based on the colonial era censuses, see Author 2013a.

[55]Banerjee, Abhijit and Lakshmi Iyer. 2005. "History, Institutions and Economic Performance"

[56]Metcalf, Thomas. 1979. *Land, landlords, and the British Raj*.

[57]Chaudhuri, Kirti N. *The Trading World of Asia and the English East India Company: 1660-1760.* Cambridge University Press, 2006.The other major export of the Company, opium, was not included because its cultivation began on a large a scale only after the establishment of British rule, which allowed the creation of an efficient monopoly.

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Online Appendix

Table A.1: Summary statistics

Wartime Annexation

Variable	Mean	Std. Dev.	Min.	Max.	N
District Prop. Landed Caste	0.055	0.063	0	0.304	134
Landed Caste	0.41	0.494	0	1	134
1857 Revolt	0.567	0.497	0	1	134
Household Wealth	-0.116	0.555	-1.113	1.996	134
Resisted Annexation	1.269	0.967	0	2	134
1901-1931 Pop. Increase.	0.106	0.171	-0.362	0.525	127
Landlord Tenure	0.483	0.366	0	1	132
Year of Annexation	1796.328	14.941	1757	1854	134
Pre-1770 Annexation	0.112	0.316	0	1	134
Post-1840 Annexation	0.007	0.086	0	1	134
Maratha Ruler	0.127	0.334	0	1	134
Muslim Ruler	0.687	0.466	0	1	134
Sikh Ruler	0	0	0	0	134
Rajput Ruler	0	0	0	0	134
Martial Group	0.088	0.221	0	1	134
Pre-colonial Exports	1.201	0.646	0	2	134
War in India at Annexation	0.560	0.498	0	1	134
EIC Military Spending	0.573	0.102	0.395	0.877	122
EIC Total Spending	0.349	0.045	0.18	0.395	122

Peacetime Annexation

Variable	Mean	Std. Dev.	Min.	Max.	N
District Prop. Landed Caste	0.093	0.114	0	0.72	309
Landed Caste	0.45	0.498	0	1	309
1857 Revolt	0.207	0.406	0	1	309
Household Wealth	-0.069	0.656	-1.179	2.072	309
Resisted Annexation	1.528	0.851	0	2	309
1901-1931 Pop. Increase.	0.215	0.536	-0.287	3.71	289
Landlord Tenure	0.482	0.463	0	1	290
Year of Annexation	1809.602	35.204	1765	1865	309
Pre-1770 Annexation	0.327	0.47	0	1	309
Post-1840 Annexation	0.252	0.435	0	1	309
Maratha Ruler	0.159	0.366	0	1	309
Muslim Ruler	0.489	0.501	0	1	309
Sikh Ruler	0.078	0.268	0	1	309
Rajput Ruler	0.084	0.278	0	1	309
Martial Group	0.14	0.311	0	1	309
Pre-colonial Exports	1.314	0.985	0	3	309
War in India at Annexation	0.793	0.406	0	1	309
EIC Military Spending	0.462	0.079	0.348	0.643	305
EIC Total Spending	0.281	0.084	0.182	0.448	305

Princely States

Variable	Mean	Std. Dev.	Min.	Max.	N
District Prop. Landed Caste	0.094	0.111	0	0.574	245
Landed Caste	0.457	0.499	0	1	245
1857 Revolt	0.22	0.415	0	1	245
Household Wealth	-0.007	0.607	-1.165	1.536	245
Princely Ruling Group	0.227	0.393	0	1	245
1901-1931 Pop. Increase.	0.18	0.302	-0.287	1.696	241
Maratha Ruler	0.184	0.388	0	1	245
Muslim Ruler	0.204	0.404	0	1	245
Sikh Ruler	0.045	0.208	0	1	245
Rajput Ruler	0.441	0.498	0	1	245
Martial Group	0.186	0.369	0	1	245
Pre-colonial Exports	0.588	0.694	0	2	245

Table A.2: Time of Annexation: Linear Regression with Wealth as the Dependent Variable

VARIABLES	(1) Wealth	(2) Wealth	(3) Wealth	(4) Wealth	(5) Wealth	(6) Wealth
Landed Caste	0.464***	0.691***	0.829***	0.867***	0.682***	0.533***
	(0.153)	(0.155)	(0.141)	(0.130)	(0.120)	(0.105)
Wartime Annexation	0.149	0.0784	0.132	0.104	0.457**	0.362***
	(0.114)	(0.167)	(0.129)	(0.128)	(0.204)	(0.116)
Wartime Annex.	-0.615***	-0.696***	-0.696***	-0.623***	-0.518**	-0.507***
*Landed Caste	(0.119)	(0.154)	(0.132)	(0.149)	(0.242)	(0.135)
District Prop. Landed	1.492**	1.368**	1.664**	1.699**	2.090***	1.202**
Caste	(0.723)	(0.635)	(0.721)	(0.717)	(0.681)	(0.606)
Dist. Prop. Landed	-2.194***	-2.178***	-2.033**	-2.299***	-2.366***	-2.018***
Caste* Landed Caste	(0.802)	(0.777)	(0.798)	(0.748)	(0.758)	(0.726)
Annexation Date	0.00239					
	(0.00179)					
Annex. Date	0.00335*					
*Landed Caste	(0.00189)					
Pre-1770 Annexation		-0.216				
		(0.174)				
Pre-1770 Annex.		-0.306				
*Landed Caste		(0.187)				
Post-1840 Annexation		-0.0391				
		(0.184)				
Post-1840 Annex.		0.121				
*Landed Caste		(0.142)				
War in India			0.163			
			(0.109)			
War in India*Landed			-0.227			
Caste			(0.147)			
Resisted Annexation				-0.0117		
				(0.0605)		
Resisted Annex.				-0.135*		
*Landed Caste				(0.0727)		
Napoleonic War Annexation					-0.498**	
					(0.202)	
Napoleonic War Annexation					-0.0657	
*Landed Caste					(0.236)	
Post-1815 Annexation						0.465***
						(0.117)
Post-1815 Annex.						0.116
*Landed Caste						(0.119)
Constant	-0.523***	-0.240	-0.527**	-0.351*	-0.742***	-0.860***
	(0.144)	(0.275)	(0.211)	(0.198)	(0.231)	(0.148)
Observations	443	443	443	443	443	443
R-squared	0.101	0.112	0.097	0.089	0.142	0.176

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note:Linear regression with household wealth as the dependent variable. The unit of observation is the district-caste category, weighted by the number of sampled households. The standard errors are clustered by districts. "Aggressive Ministries" are those that initiated a war in Europe, and includes those of North, Pitt the Younger and Lord Aberdeen.

Table A.3: British Annexation Policy: Linear Regression with Wealth as the Dependent Variable

VARIABLES	(1) Wealth	(2) Wealth	(3) Wealth	(4) Wealth
Landed Caste	0.613***	0.647***	0.922***	1.030**
	(0.112)	(0.128)	(0.355)	(0.465)
Wartime Annexation	0.0385	0.104	-0.232*	-0.00146
	(0.179)	(0.127)	(0.139)	(0.132)
Wartime Annex.	-0.685***	-0.676***	-0.497***	-0.623***
*Landed Caste	(0.176)	(0.126)	(0.117)	(0.130)
District Prop. Landed	1.450**	1.738**	1.658***	1.476**
Caste	(0.603)	(0.722)	(0.606)	(0.697)
Dist. Prop. Landed	-1.866***	-2.082**	-2.199***	-2.168***
Caste* Landed Caste	(0.678)	(0.809)	(0.703)	(0.794)
Tory Government	0.180			
	(0.160)			
Tory Government	0.00121			
*Landed Caste	(0.163)			
Aggressive Ministry		0.108		
		(0.0957)		
Aggressive Ministry		0.0774		
*Landed Caste		(0.146)		
EIC Military Spending			1.254*	
			(0.707)	
EIC Total Spending			2.112**	
			(0.822)	
EIC Military Spending			-0.735	
* Landed Caste			(0.815)	
EIC Total Spending			0.184	
* Landed Caste			(1.068)	
EIC Land Revenue				-0.915**
				(0.452)
EIC Land Revenue				-0.491
* Landed Caste				(0.552)
Constant	-0.353**	-0.381**	-1.217***	0.506
	(0.177)	(0.168)	(0.246)	(0.489)
Observations	443	443	427	427
R-squared	0.104	0.088	0.204	0.141

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Linear regression with household wealth as the dependent variable. The unit of observation is the district-caste category, weighted by the number of sampled households. The standard errors are clustered by districts. "Aggressive Ministries" are those that initiated a war in Europe, and includes those of North, Pitt the Younger and Lord Aberdeen. The East India Company Fiscal variables refer to the year of annexation, and are normalized by the total level of revenue for that year.

Table A.4: Alternative Specifications: Linear Regression with Wealth as the Dependent Variable

VARIABLES	(1) Treaties	(2) Landed Groups Only	(3) Districts	(4) Individual Obs.	(5) District-Castes
Landed Caste	0.581***			0.625***	0.649***
	(0.135)			(0.0639)	(0.0660)
Wartime Annexation	0.197	-0.565***	-0.305***	0.0990**	0.108***
	(0.124)	(0.141)	(0.0644)	(0.0454)	(0.0212)
Landed Caste*	-0.703***			-0.497***	-0.672***
Wartime Annexation	(0.121)			(0.0736)	(0.0832)
Treaty Year	0.00858***				
	(0.00169)				
Landed Caste*	0.000984				
Treaty Year	(0.00179)				
Dist. Prop. Landed	0.729	-0.379	-1.528***	1.267***	1.698***
Caste	(0.737)	(0.379)	(0.299)	(0.209)	(0.114)
Dist. Prop. Landed	-1.921**			-2.031***	-2.077***
Caste* Landed Caste	(0.822)			(0.307)	(0.262)
Constant	-0.714***	0.949***	0.697***	-0.471***	-0.373***
	(0.144)	(0.263)	(0.109)	(0.0640)	(0.0327)
Observations	443	194	194	50,966	6,312
R-squared	0.207	0.148	0.156	0.020	0.052

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note:Linear regression with household wealth as the dependent variable, exept in Model Four where the the district-level differences in wealth between landed and non-landed castes. The unit of observation is the district-caste category in models 1-3, the district in Model 4, the household in Model 5, and the district-caste in Model 6. The results are weighted by the number of sampled households, except in Model 5 where they are weighted using the original survey weights. The standard errors are clustered by districts, except in Model 5, where they are clustered by survey clusters.

Table A.5: Robustness Checks: Linear Regression with Wealth as the Dependent Variable

VARIABLES	(1) Modern State FE	(2) No Cities	(3) No Punjab or Bengal	(4) Poverty Controls	(5) No Sov. Change
Landed Caste	0.540***	0.542***	0.698***	0.240	0.705***
	(0.1000)	(0.0746)	(0.135)	(0.220)	(0.136)
Wartime Annexation	0.161	0.0169	0.0828	0.100	0.147
	(0.115)	(0.0854)	(0.129)	(0.130)	(0.168)
Wartime Annex.	-0.398***	-0.484***	-0.662***	-0.508***	-0.766***
*Landed Caste	(0.125)	(0.0920)	(0.126)	(0.138)	(0.159)
District Prop.	-0.694	1.389***	2.103***	0.586	2.095**
Landed Caste	(0.552)	(0.469)	(0.730)	(0.740)	(0.812)
Dist. Prop. Landed	-1.399*	-1.568***	-2.269***	-2.313**	-2.330**
Caste* Landed Caste	(0.745)	(0.405)	(0.853)	(1.014)	(0.910)
Dist. Poverty				-0.0190***	
				(0.00379)	
Dist. Poverty Decline				-0.00649	
				(0.00712)	
Dist. Poverty				0.00841	
*Landed Caste				(0.00512)	
Dist. Poverty Decline				-0.00746	
*Landed Caste				(0.00604)	
Constant	-0.364**	-0.326**	-0.470***	0.321	-0.453**
	(0.155)	(0.134)	(0.167)	(0.291)	(0.211)
Observations	267	430	384	395	330
R-squared	0.046	0.076	0.150	0.273	0.116
State FE	YES				

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note:Linear regression with household wealth as the dependent variable, except Model Seven, where the difference between landed and non-landed caste wealth is the dependent variables. The unit of observation is the district- caste category, weighted by the number of sampled households. The column headings list excluded classes of data. "Sov. Change" areas are areas where the ruling dynasty at the time of annexation was different than that in 1756. "Poverty Decline is the change in headcount ratio in the National Sample Survey between 1972 and 1993.

Table A.6: Alternative Definitions of Caste: Linear Regression with Wealth as the Dependent Variable

	(1)	(2)
VARIABLES	Population Change	No Religious Minorities
Landed Caste	0.731***	
	(0.139)	
Wartime Annexation	0.0751	0.0920
	(0.132)	(0.181)
Wartime Annex.	-0.657***	-0.627***
*Landed Caste	(0.164)	(0.224)
1901-1931 Change	-0.436*	
in Caste Population	(0.228)	
District Prop. Landed Caste	1.655**	1.711
	(0.712)	(1.360)
Dist. Prop. Landed	-2.256***	-0.218
Caste* Landed Caste	(0.826)	(0.845)
Constant	-0.274	-0.315
	(0.183)	(0.238)
Observations	416	443
R-squared	0.108	0.056

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note:Linear regression with household wealth as the dependent variable. The unit of observation is the district-caste category, weighted by the number of sampled households. The standard errors are clustered by districts. The first two models use alternative definitions of jati, described in the column headings.

Table A.7: Alternative Explanations: Linear Regression with Wealth as the Dependent Variable

VARIABLES	(1) Wealth	(2) Wealth	(3) Wealth	(4) Wealth	(5) Wealth	(6) Wealth
Landed Caste	0.580***	0.485***	0.360***	0.639***	0.469***	0.581***
	(0.130)	(0.0831)	(0.0977)	(0.156)	(0.100)	(0.135)
Wartime Annexation	0.113	0.370**	0.102	0.0900	0.0397	0.00228
	(0.118)	(0.144)	(0.127)	(0.129)	(0.0863)	(0.109)
Wartime Annex.	-0.431***	-0.573***	-0.145	-0.627***	-0.292***	-0.573***
*Landed Caste	(0.130)	(0.156)	(0.171)	(0.127)	(0.101)	(0.123)
Landlord Tenure	-0.624***					
	(0.135)					
Landlord Tenure	0.00516					
*Landed Caste	(0.143)					
District Prop.	1.018**	-0.732	1.788**	1.272*	0.369	1.224*
Landed Caste	(0.506)	(0.727)	(0.717)	(0.698)	(0.356)	(0.716)
Dist. Prop. Landed	-1.983***	-0.0494	-3.773***	-2.114***	-1.450***	-1.832**
Caste* Landed Caste	(0.673)	(0.717)	(0.848)	(0.809)	(0.453)	(0.875)
Martial Group			1.261***			
			(0.170)			
Pre-colonial Exports				-0.169***		
				(0.0494)		
Pre-colonial Exports				0.00547		
*Landed Caste				(0.0620)		
District Wealth SD						1.746***
						(0.132)
Soil Quality Dummies	NO	NO	NO	NO	YES	NO
Constant	-0.0343	-0.864***	-0.431***	-0.102	-0.593***	-1.558***
	(0.190)	(0.145)	(0.156)	(0.202)	(0.127)	(0.172)
Observations	422	253	443	443	381	443
R-squared	0.270	0.135	0.197	0.134	0.162	0.364

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note:Linear regression with household wealth as the dependent variable. The unit of observation is the district-caste category, weighted by the number of sampled households. The standard errors are clustered by districts. Model Two contains only districts with 30% or more of the land owned by "landlords" as coded by Banerjee and Iyer . The soil quality measures in Model Five are the direct effect of the proportion of land in a district in 1991 that had black soil, red soil, alluvial soil, sandy soil, or was steep-sloping, and the interactions of those variables with the landed caste measure.

Table A.8: Alternative Definitions of "Landed Castes"

VARIABLES	(1) Ag. Castes	(2) Ruling Castes	(3) Rajputs and Marathas	(4) All Upper Castes
Landed Caste Members	0.450***	0.649***	0.727***	0.364***
	(0.126)	(0.113)	(0.162)	(0.117)
Wartime Annexation	0.0924	0.0768	0.137	0.127
	(0.134)	(0.140)	(0.115)	(0.110)
Wartime Annex.	-0.233**	-0.324***	-0.674***	-0.277**
*Landed Caste	(0.110)	(0.116)	(0.179)	(0.112)
District Prop.	1.459***	1.964***	2.600***	0.672**
Landed Caste	(0.433)	(0.475)	(0.717)	(0.276)
Dist. Prop. Landed	-1.298**	-1.916***	-3.024***	0.548**
Caste* Landed Caste	(0.504)	(0.549)	(0.921)	(0.231)
Constant	-0.497***	-0.498***	-0.422***	-0.703***
	(0.163)	(0.163)	(0.151)	(0.126)
Observations	488	482	411	489
R-squared	0.091	0.153	0.141	0.347

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note:Linear regression with household wealth as the dependent variable. The unit of observation is the district-caste category, weighted by the number of sampled households. The standard errors are clustered by districts. Each model defines the "landed caste" category differently. Model One uses castes that were listed as "agricultural" at the 1911 census, Model Two uses castes that ruled a polity in 1756, Model Three uses only Rajputs and Marathas and Model Three uses castes that were not listed as OBCs, SCs, or STs, by the Indian goverment in 19998