by Daron Acemoglu

Understanding institutions

Daron Acemoglu delivered the 2004 Lionel Robbins Memorial Lectures at the LSE in February. His theme was that understanding the differences in the formal and informal rules governing economic and political interactions was the first step to explaining differences in long-run economic performance. This article summarises the three lectures.

Tremendous differences in incomes and standards of living exist today between the rich and the poor countries of the world. Average per capita income in sub-Saharan Africa, for example, is less than one twentieth that in the United States. Explanations for why the economic fortunes of countries have diverged so much abound. Poor countries, such as those in sub-Saharan Africa, Central America or South Asia, often lack functioning markets, their populations are poorly educated and their machinery and technology are outdated or nonexistent. These are, however, only *proximate* causes of poverty, begging the question of why these places do not have better markets, better human capital, more investments, better machinery and better technology. There must be some *fundamental* causes leading to these outcomes and, via these channels, to dire poverty.

The two main candidates to explain such fundamental causes are geography and institutions. The *geography hypothesis*, which has a large following both in the popular imagination and in academia, maintains that the geography, climate and ecology of a society's location shape both its technology and the incentives of its inhabitants. The geography hypothesis emphasizes "forces of nature" as a primary factor in the poverty of nations. The alternative, the *institutions hypothesis*, is about "man-made" influences. According to this view, some societies are organised with "good institutions" that encourage investment in machinery, in human capital, and in better technologies and, consequently, they achieve economic prosperity.

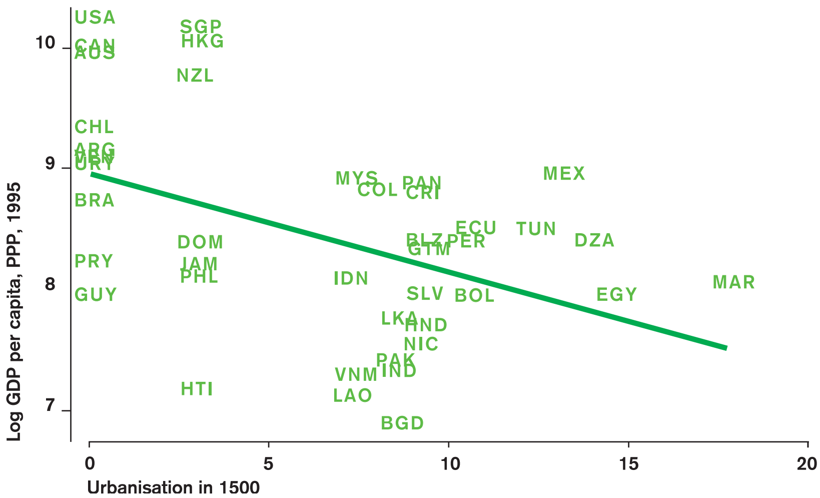
Three crucial elements comprise "good institutions": first, enforcement of property rights for a broad cross section of society, so that a variety of individuals have incentives to invest and take part in economic life; second, constraints on the actions of elites, politicians and other powerful groups so that these people cannot expropriate the incomes and investments of others in the society or create a highly uneven playing field; and, finally, some degree of equal opportunity for broad segments of the society, so that they can make investments, especially in human capital, and participate in productive economic activities. These good institutions contrast with conditions in many societies of the world throughout history and today, where the rule of law is selectively applied, property rights are nonexistent for the vast majority of the population, the political and economic power of elites is without bounds, and only a small fraction of citizens have access to education, investment and production opportunities.

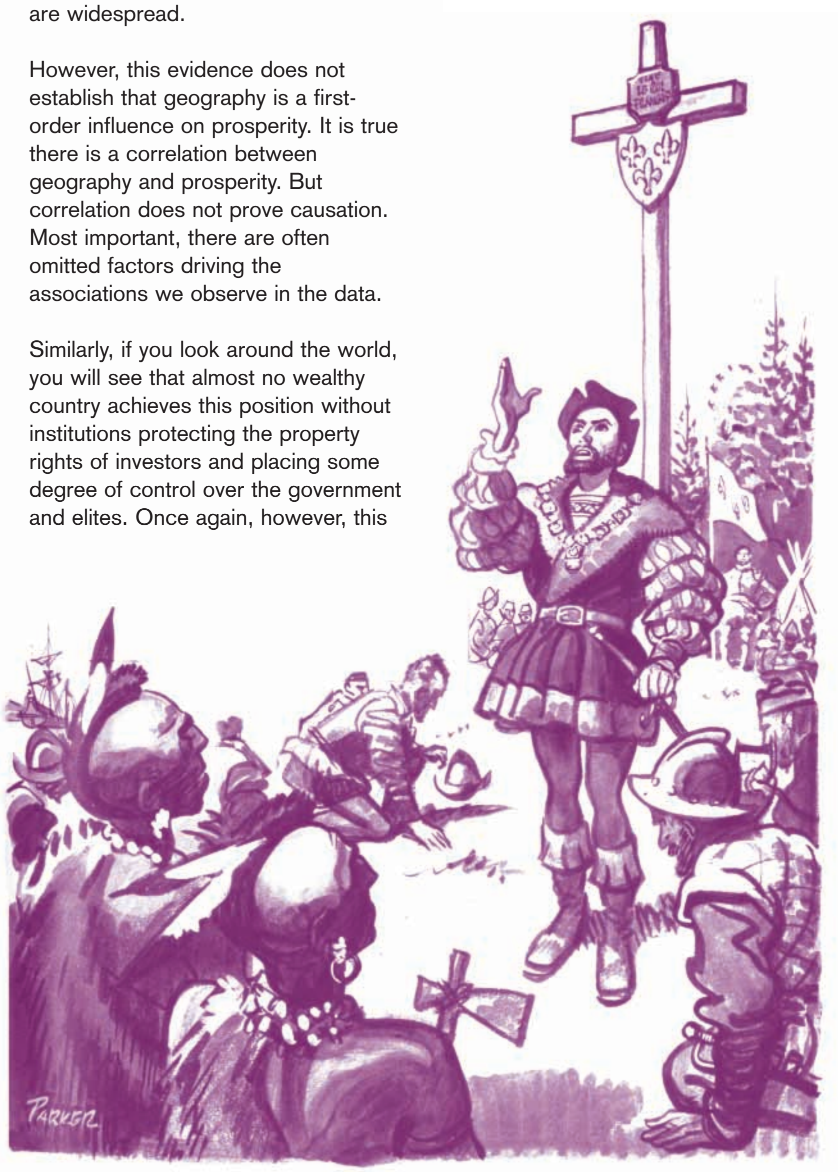
If you want to believe that geography matters, look at a world map. Locate the poorest places in the world, with per capita income levels less than one twentieth of the United States. You will find almost all of them close to the equator, in very hot regions with periodic torrential rains, in places where, by definition, tropical diseases are widespread.

However, this evidence does not establish that geography is a first-order influence on prosperity. It is true there is a correlation between geography and prosperity. But correlation does not prove causation. Most important, there are often omitted factors driving the associations we observe in the data.

Similarly, if you look around the world, you will see that almost no wealthy country achieves this position without institutions protecting the property rights of investors and placing some degree of control over the government and elites. Once again, however, this

Figure 1. Shifting prosperity: 1500 versus 1995

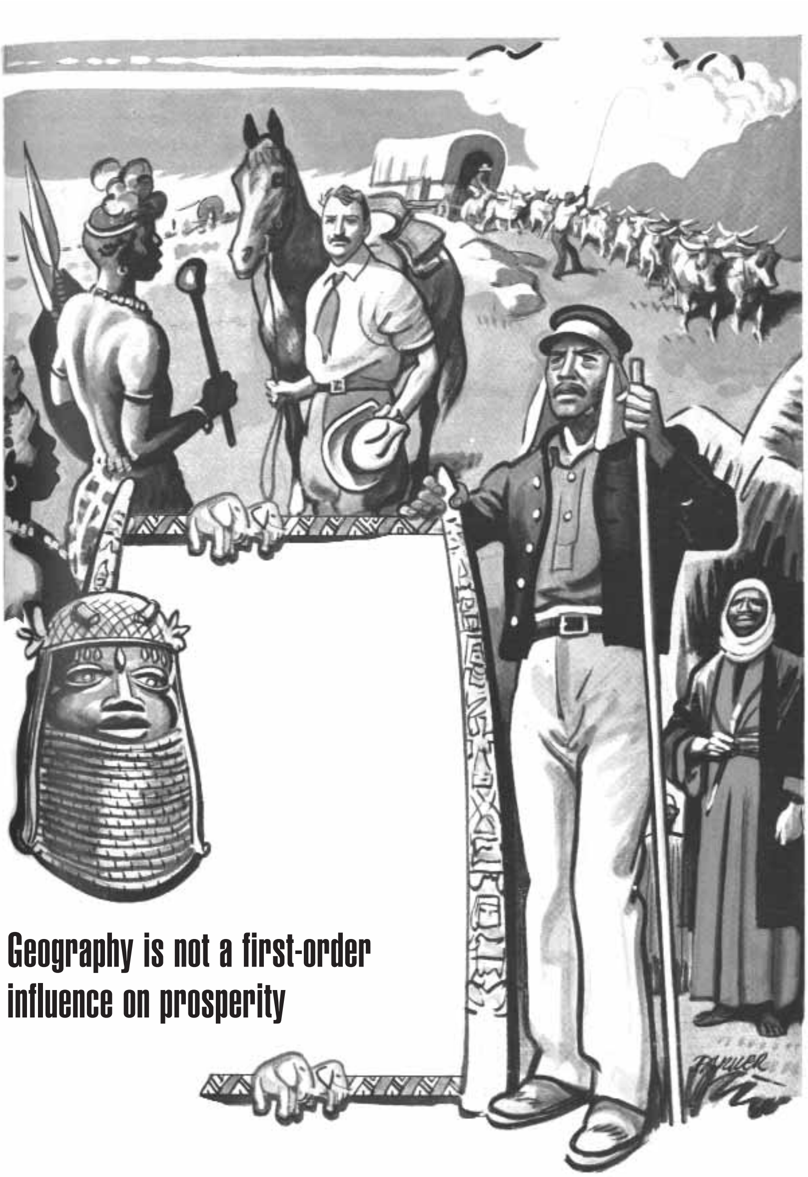




correlation between institutions and economic development could reflect omitted factors. or reverse causality.

To make progress in understanding the relative roles of geographic and institutional factors, we need to find a source of "exogenous" variation in institutions: in other words, a "natural experiment" where institutions change for reasons unrelated to potential omitted factors (while geographic factors remain constant, as they almost always do).

The colonisation of much of the globe by Europeans starting in the 15th century provides such a natural experiment. This experience transformed the institutions in many lands conquered or controlled by Europeans, but by and large had no effect on their "geographies". Therefore, if geography is the key factor determining the economic potential of an area or a country, the places that were rich before the arrival of the Europeans should continue to be rich after the colonisation experience and, in fact, still be rich today. Since the key determinant of prosperity remains the same, we should see a high degree of *persistence* in economic outcomes. If, on the other hand, it is institutions that are central, then those places where



good institutions were introduced or developed should get richer, compared with those where Europeans introduced or maintained institutions to extract resources or exploit the non-European population.

Historical evidence suggests that Europeans indeed pursued very different colonisation strategies, with very different associated institutions, in various colonies. At one extreme, Europeans set up exclusively extractive institutions, exemplified by the Belgian colonisation of the Congo, slave plantations in the Caribbean or forced labour systems in the mines of Central America. These institutions introduced neither protection for the property rights of regular citizens nor constraints on the power of elites. At the other extreme, Europeans founded a number of colonies where they created settler societies, replicating – and often improving – the European form of institutions protecting private property. Primary examples of this mode of colonisation include Australia, New Zealand, Canada and the United States. The settlers in these societies also managed to place significant constraints on elites and politicians, even if they had to fight to achieve this objective.

Geography is not a first-order influence on prosperity

So what happened to economic development after colonisation? Did places that were rich before colonization remain rich, as suggested by the geography hypothesis? Or was there a systematic change in economic fortunes associated with the changes in institutions?

The historical evidence shows no evidence of the persistence suggested by the geography hypothesis. On the contrary, there is a remarkable "reversal of fortune" in economic prosperity. Societies like the Moguls in India and the Aztecs and the Incas in America, which were among the richest civilizations in 1500, are among the poorer areas of the world today. In contrast, countries occupying the territories of the less-developed civilisations in North America, New Zealand and Australia are now much richer than those in the lands of the Moguls, Aztecs and Incas. Moreover, the reversal of fortune is not just confined to this comparison. Using various proxies for prosperity before modern times, we can show that the reversal is a much more widespread phenomenon. For example, before industrialisation only relatively developed societies could sustain significant urbanisation and high levels of population, so urbanisation rates and population density are relatively good proxies for prosperity before European colonisation. Figures 1 shows a strong negative relationship between urbanisation rates in 1500 and income per capita today and between population density in 1500 and income per capita today. The former European colonies that are relatively rich today are those that were poor and sparsely-settled before Europeans arrived.

This reversal is prima facie evidence against the most standard versions of the geography hypothesis. It cannot be that the climate, ecology or disease environments of the tropical areas condemn these countries to poverty today, since these areas with the same climate, ecology and disease environment were *richer* than the temperate areas 500 years ago. Although it is possible that the reversal may be related to geographic factors that have time-varying effects on economic prosperity, for example because certain characteristics that first cause prosperity then condemn nations to poverty, a more detailed look at the evidence shows that there is no evidence of any such factors, nor any support for "sophisticated" geography hypotheses of this sort.

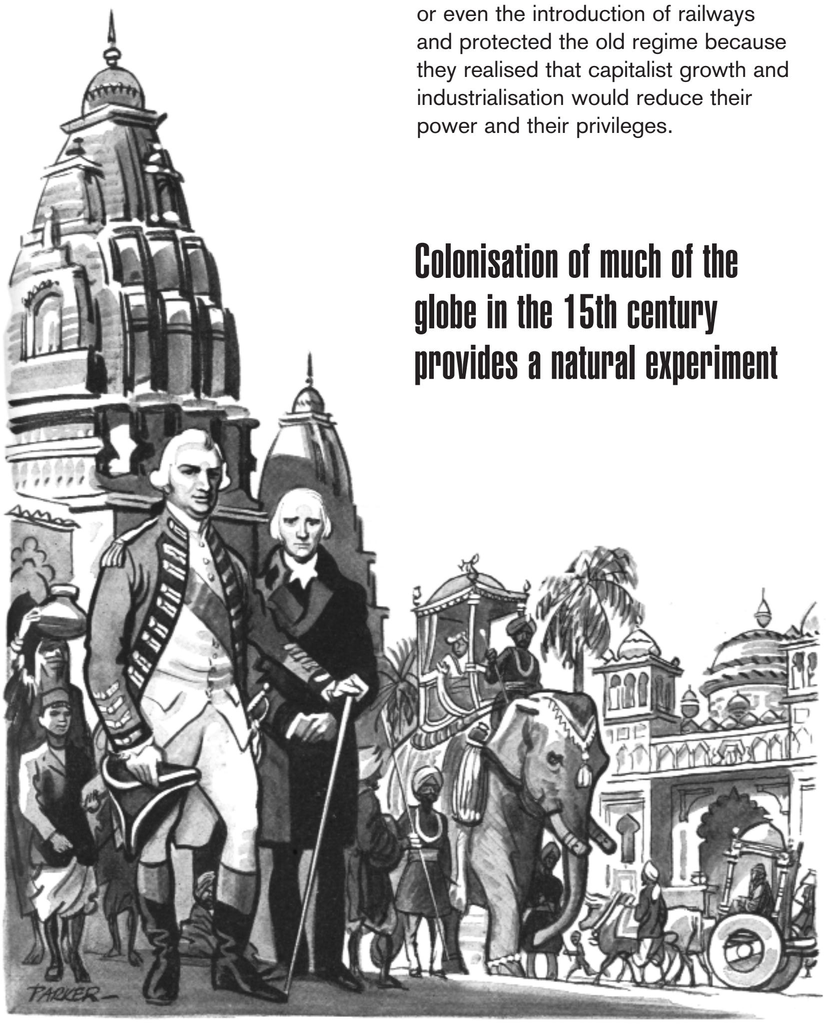
But is the reversal of fortune consistent with the institutions hypothesis? The answer is yes. In fact, once we look at the variation in colonisation strategies, we see that the reversal of fortune is exactly what the institutions hypothesis predicts. European colonialism made Europeans the politically powerful group with the capability to influence institutions more than any indigenous group was able to at the time. In places where Europeans did not settle (and thus did not care much about aggregate output or welfare), in places where there was a large population to be coerced and employed cheaply in mines or in agriculture (or simply taxed), in places where there was a lot to be extracted, Europeans pursued the strategy of setting up extractive institutions or taking over already existing extractive institutions and hierarchical structures. In those colonies, there were no constraints on the power of the elites (which were typically the Europeans themselves and their allies) and no civil or property rights for the majority of the population. In fact, many of them were forced labourers or slaves. Contrasting with this pattern, in other colonies where there was little to be extracted, where most of the land was empty, where the disease environment was favourable, Europeans settled in large numbers and developed laws and social institutions to ensure that they themselves were protected, both in their political and economic lives. In these colonies, the institutions were, therefore, much more conducive to investment and economic growth.

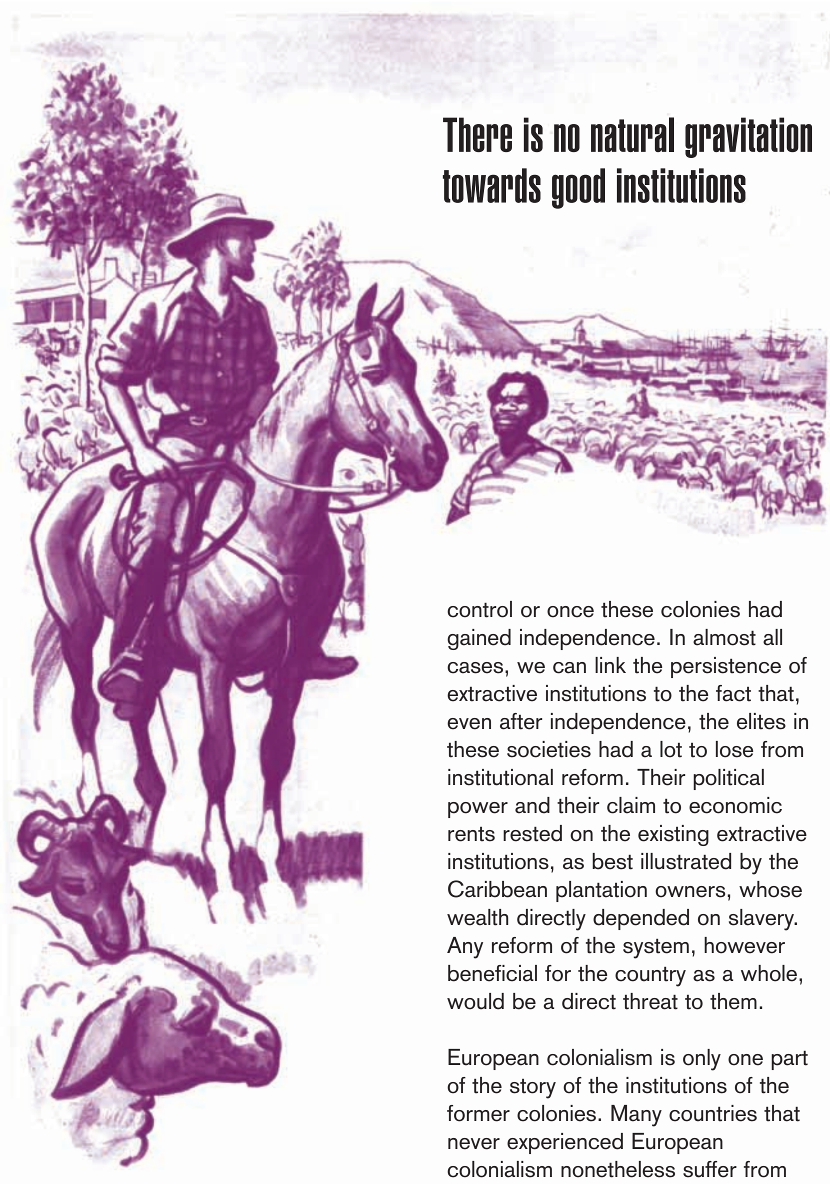
This evidence, however, does not mean that geography does not matter at all. Which places were rich and which were poor before Europeans arrived might have been determined by geographic factors. These geographic factors also probably influenced the institutions that Europeans introduced, as illustrated by the example of the climate and soil quality in the Caribbean, which made it productive to grow sugar, encouraging the development of the plantation system based on slavery. What the evidence shows instead is that geography neither condemns a nation to poverty nor guarantees its economic success. If you want to understand why a country is poor today, you have to look at its institutions, not at its geography.

If institutions matter so much for economic prosperity, why do some societies choose or end up with bad ones? Moreover, why do these bad institutions persist even long after their disastrous consequences are apparent? Is it an accident of history, the result of some misconceptions, or mistakes by societies or their policy-makers? Recent empirical and theoretical research suggests that the answer is no: there are no compelling reasons to think that societies will naturally gravitate towards good institutions. Institutions not only affect the economic prospects of nations, but are also central to the *distribution* of income among various individuals and groups in society. Institutions not only affect the size of the social pie, but also how it is distributed. This perspective implies that a potential change from dysfunctional and bad institutions toward better ones that will increase the size of the social pie may nonetheless be blocked when such a change significantly reduces the size of the slice that powerful groups receive from the pie and when they cannot be credibly compensated for this loss.

That there is no natural gravitation towards good institutions is illustrated by the attitudes of the landed elites and the emperors in Austria-Hungary and in Russia during the nineteenth century. They blocked industrialisation or even the introduction of railways and protected the old regime because they realised that capitalist growth and industrialisation would reduce their power and their privileges.

Colonisation of much of the globe in the 15th century provides a natural experiment





There is no natural gravitation towards good institutions

Similarly, European colonists did not set up the institutions to benefit society as a whole. They chose good institutions where it was in their interests, because they would be the ones living under the umbrella of these institutions as in much of the New World. In contrast, they introduced or maintained already-existing extractive institutions when it was in their interest to extract resources from the non-European populations of the colonies, as in much of Africa, Central America, the Caribbean and South Asia. Furthermore, these extractive institutions showed no sign of gravitating towards becoming better institutions, either under European control or once these colonies had gained independence. In almost all cases, we can link the persistence of extractive institutions to the fact that, even after independence, the elites in these societies had a lot to lose from institutional reform. Their political power and their claim to economic rents rested on the existing extractive institutions, as best illustrated by the Caribbean plantation owners, whose wealth directly depended on slavery. Any reform of the system, however beneficial for the country as a whole, would be a direct threat to them.

European colonialism is only one part of the story of the institutions of the former colonies. Many countries that never experienced European colonialism nonetheless suffer from institutional problems (while certain other former European colonies have arguably some of the best institutions in the world today). Nevertheless, the perspective developed here applies to these instances as well: institutional problems are important in a variety of instances and, in most of these, the source of institutional problems and the difficulty of institutional reform, lie in the fact that any major change will create winners and losers. The potential losers are often powerful enough to resist change.

The persistence of institutions and potential resistance to reform do not mean that institutions are unchanging. They can show significant evolution and even highly dysfunctional institutions can be successfully transformed, as demonstrated by Botswana, which managed to build a functioning democracy after its independence from Britain and become the fastest-growing country in the world. Institutional change will happen either when groups that favour change become powerful enough to impose it on the potential losers, or when societies can strike a bargain with potential losers so as to credibly compensate them after the change takes place, or perhaps to shield them from the most adverse consequences of these changes. Recognising the importance of institutions in economic development and the often formidable barriers to beneficial institutional reform is the first step towards significant progress in jump-starting rapid growth in many areas of the world today.

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This article first appeared in the June 2003 issue of the IMF's magazine, *Finance & Development*.

Further reading

Daron Acemoglu, Simon Johnson and James A. Robinson, "Colonial Origins of Comparative Development: An Empirical Investigation", *American Economic Review*, 91, 1369-1401.

Daron Acemoglu, Simon Johnson, and James A. Robinson, "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution", *Quarterly Journal of Economics*, November, CXVII, 4, pp.1231-1294.

Daron Acemoglu and James A. Robinson, "Political Losers as a Barrier to Economic Development", *American Economic Review*, 90, 126-130.

Daron Acemoglu, "Why Not a Political Coase Theorem? Social Conflict, Commitment and Politics", *Journal of Comparative Economics*, Volume 31, pp. 620-652.