

Why Rhino Mounted Bantu Never Sacked Rome

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A review of *Guns, Germs and Steel* by Jared Diamond,
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The Martiniquais poet and ideologue of *négritude*, Aimé Césaire, famously celebrated the sons and daughters of Africa as:

*Ceux qui n'ont inventé ni la poudre ni la boussole
ceux qui n'ont jamais su dompter la vapeur ni l'électricité
ceux qui n'ont exploré ni les mers ni le ciel...*

But Césaire was too modest. Not only did Africans south of the Sahara fail to invent gun-powder, the compass, gas and electricity; they failed to invent, or even acquire in pre-colonial times, writing, the yoke, the plough, and the wheel. Césaire thought this was all to the good, but others have anguished over it. John Speke, discoverer of the source of the White Nile, and among the most open-minded and (next to Burton) libidinous of the Victorian explorers, observed “How the Negro has lived through so many ages without advancing seems marvellous, when all the countries surrounding Africa are so forward in comparison.” Very much a man of his time, Speke was necessarily less aware than we are today of the diversity of African societies, their extraordinary artistic wealth, and the antiquity of their trade with the world beyond. Yet there is no doubt that Césaire and Speke, each in his own way, got this much right: away from the coastal fringes, life in a traditional sub-Saharan African village was lo-tech, and would hardly appear less so were the comparison with Europe in the age of Hadrian rather than that of Victoria.

Speke had no truck with the idea that African backwardness was due to a want of innate ability among Africans, rather he saw them as being cut off from the main stream of civilisation; what they needed, he thought, was a bit of the Raj. Which, speaking generally, is what they got, as had most of the world before them. It is now hardly possible for any citizen of one of the former colonial powers to consider the past 500 years of global history without raking shame for all that was destroyed in the era of European expansion. Leafing through the atlases of a previous generation we may draw comfort from the thought that that all the pink bits (and all the other hues of Empire) once displayed with such fierce pride were to vanish rather quickly. Yet, as we do so, we may pause to consider that their very presence, symbolic of the innumerable battles in which a handful of small European nations

engaged and conquered the world, leaves us with a profound historical puzzle, namely, why did we always win?

There is, of course, an easy answer: Pizarro had the cannon that Atahualpa did not; Lugard had the Maxim-Nordfeldts that brought Mwanga to the table. And it was not just a matter guns, but also of horses, compasses, ocean-faring ships, indeed, the entire social, economic, ideological and technological package that brought Europe to global supremacy. But it is by no means obvious, except in retrospect, that such a package should have been assembled by Europeans rather than, say, the Waganda whom Speke befriended, indeed, the Aborigines of Australia. To put the matter so is to reveal a void at the heart of historical explanation, a rarely asked and hence largely unanswered question, and it is this: over the past 10,000 years, why did some societies develop in size, complexity and, most of all, power, while others did not?

Jared Diamond has written a book to answer just this question. The author is a remarkable man; as much a natural philosopher as a scientist, he has studied the digestive systems of Burmese pythons, described a new species of flightless bird, and written on biogeography of the New Guinea, the evolution of languages, the true reasons why Mayans gave each other enemas, and many other, equally absorbing, topics besides. And now he has set out to show historians how to do history. The sheer daring of his project is remarkable; the questions he asks, acutely important, and the solutions he gives so simple and elegant that one can only wonder that they have not been given before. For *Guns, Germs and Steel* is global history, an attempt to transcend the peculiarities of politics and culture and find the general laws that explain the fates of human societies, the reasons why some have triumphed and others become casualties in the last 13,000 years of human endeavour. It is a book for anyone who has suspected that the course of history must be explicable in terms of simple causal hypotheses of the type that prevail in the natural sciences, that those hypotheses can be tested, and that history is not a subject which need be restricted to particularist accounts or else re-fashioned each generation to make a garment of current theoretical cut, but is instead one that presents problems that can, very simply, be solved.

When two scholars, writing at opposite ends of a century, commence their books by attacking the same misconceptions, it is likely that their subject has advanced but little in-between.

The most popular of the idols that have been set up by this rather priggish and pedantic school of superstition [racial science] is “Nordic Man”, the xanthotrichous, glaucopian, dolichocephalic variety of *Homo*

leucodermaticus whose pet name (given him by Nietzsche) is the “Blond Beast”.

Thus A. J. Toynbee in the opening volume of his magisterial (and misguided) *Study of History* (1933). Toynbee sought to explain why civilisations rise and fall, but before he could do so, he had to deal with the theorists of the *herrenvolk*. Diamond has to deal with their epigones, the theorists of race and IQ.

We’re assured that the seemingly transparent biological explanation for the world’s inequalities as of AD 1500 is wrong, but we’re not told what the correct explanation is. Until we have some convincing, detailed, agreed-upon explanation for the broad pattern of history, most people will continue to suspect that the racist biological explanation is correct after all.

So what *is* the explanation? Diamond argues that the causes of global inequality are ancient, as much as 50,000 years old, the time when modern humans began to fan out over the globe. As continent after continent was settled, the earliest humans drew, as it were, tickets in a lottery. For the winners all would be movement: farms, draught animals, cities, kingdoms, and, finally, empires. For the losers there would be stasis, or nearly so; millenia in the stone age which would cease only with their conquest and, sometimes, annihilation. The tickets they drew were the very territories over which they strode; for Diamond, geography is fate.

Geography influences the fate of human societies in three ways. First, through the quantity and quality of plants and animals that are available for domestication. Some continents were biologically impoverished when humans arrived on them; others were swiftly made so by the action of early hunters (Diamond is a persuasive advocate of the “overkill” hypothesis for the extinction of the Pleistocene megafauna in Australasia and the Americas). In such continents social evolution stalled until suitable domesticates arrived from elsewhere. Second, via size. The larger the territory, the more people it is likely to support, and greater the chances that social and technological innovations will arise and be retained; there are numerous examples of isolated island populations simply forgetting the most rudimentary technological skills (Diamond cites the case of the Tasmanian Aborigines who lost the art of making barbed spears, bone tools, boomerangs, ground stone tools, hooks, nets, pronged spears, traps, sewing, and, most remarkably, making fire -- all skills found among continental Aborigines). Third, through the topography and orientation of land-masses. Domesticated plants and animals are necessarily suited to a limited range of climates, and climate is strongly influenced by latitude. Those land-masses, notably Eurasia, which are oriented on an East-West axis have vast areas suited to a given

domesticate or cultivar, and such innovations spread rapidly across them. In contrast, North-South continents, such as South America, cross many climatic zones: a Meso-American crop is likely to be useless in the tropical Amazon basin, even more so, on the Patagonian pampas. The importance of diffusion is no-where more apparent than in the history of Europe, which received many domesticates from South-West Asia (emmer wheat, barley, rye, sheep, goats). And then, geography also influences the spread of technology: China gave much to Europe; Egypt gave little to Great Zimbabwe.

These arguments are compelling. There is no theory of social evolution which does not have farming as the *sine qua non* of population growth and the rise of civilizations. It is easy to see why peoples who acquire farming late, or not at all, fall prey to those who have had it for millenia. Yet Diamond has set himself a formidable task; there is so much inequality in the world, and one wonders how much of it he has, indeed, explained.

It is an amusing irony that both Diamond and his shadowy opponents, the mavens of race and IQ, draw inspiration from the work of one man, Sir Francis Galton, idiosyncratically brilliant cousin to Charles Darwin. Galton was the first to claim a quantitative relationship between cranial capacity and mental ability in humans (he thought that Cambridge undergraduates who won Firsts had brains about 5% larger than those who did not); he coined the term "eugenics". Galton also had ideas about animal domestication. In 1865 he suggested that the animals of the world had, in the course of history, been tested over and over again for their potential as domesticates, and that all but a few had been founding wanting. A good domesticate, Galton said, must be hardy, comfort loving, breed freely in captivity, be easy to tend, have an inborn liking to man, and, most of all, should be "useful to the savages."

Such Galtonian species, Diamond claims, were, quite by chance, remarkably common in Eurasia, source of 13 of the 14 large herbivores that have a long history of domestication (including the "major five": sheep, goat, cow, pig, horse) and, more importantly for the course of history, entirely lacking in the rest of the world (the exception being the Andean guanaco, ancestor to the llama and the alpaca). Biologically speaking, Africa, Australia and, to a lesser degree, the Americas were simply out of luck; they had to acquire their domestic animals from elsewhere. The auroch, ancestor to the modern cow, was, for example, domesticated in Asia about 8,000 BC, but only reached sub-Saharan Africa around 2,500 BC, and even then progress down the continent was slowed by tsetse flies which carry a virulent cattle disease. By the time cattle-herding culture reached the Cape of Good Hope in 100 AD, African political and technological culture was already hopelessly behind.

Why didn't Africans domesticate animals themselves? Humans have been longer in Africa than any other continent, and Diamond knows, of course, that, Addax to Zebra, Africa is a continent of large herbivores, some 51 species in all. All of these, Diamond asserts, were undomesticable: Buffaloes are mean, zebras bite their zookeepers, gazelles jump high and that is why the veldt never resounded to the thunder of Bantu cavalry. Actually, he says that is why rhino-mounted Bantu never sacked Rome. I have my doubts. We know that at least some African animals are both tameable and domesticable. In the early 1890's it was the favourite amusement of the remarkable 2nd Lord Rothschild to drive a carriage set to a vivid and elegant quartet of Burchell's zebras down Piccadilly and into the courtyard of Buckingham Palace (the zebras, it is said, were quite camouflaged in the traffic). That these lovely creatures can be broken in should come as no surprise, for their social behaviour is very much like that of feral domestic horses: males form non-territorial dominance hierarchies and so will allow themselves to be grouped together and led as in harness or in cavalry. To be sure, one of Lord Rothschild's zebras killed a groom, but that's poor reason to scratch them from the Domestication Derby; doubtless numerous Neolithic casualties were incurred in the evolution of the once wild, and now extinct, *Equus ferus* to the more tractable creature that later powered the chariots of Indo-European expansion. Pigs are problematical too. The Eurasian wild boar, vigorous ancestor to Empress of Blandings and her torpid relations, has been domesticated repeatedly, its solitary habits and nasty disposition, notwithstanding. This is almost certainly because of its tendency to rootle in the crops and the garbage of human settlements, a fondness that it shares with its African cousin, the bushpig. Why was the bushpig not domesticated? Diamond does not say, and we may ask the same question of the eland and the oryx, two large African antelope, that have been much studied and promoted this century as the perfect animals to replace the scrawny cattle of the African landscapes. That oryx farming hasn't caught on in modern Africa is due less to any deficiencies in the temperament or constitution of these scimitar-horned animals than an ubiquitous pastoral culture which measures wealth in cattle. To make his case, Diamond has to show that each of Africa's large herbivores labours under some disadvantage compared to its Eurasian counterparts, and he doesn't even attempt to do this. He is rather like a disgruntled investor who, anguishing over the failure of a Belgian ostrich farm, puts the blame on the birds themselves. It's all a bit unfair.

All this highlights a problem with *Guns, Germs and Steel*: For all its vast scope, perhaps because of that scope, it is a weak and unscholarly book. It relies too much on the blunt assertion and the telling anecdote, too little on numbers. It contains no statistics. Does this matter? It is, after all, written for the general reader. The answer is, yes it does, for the core of Diamond's thesis is a quantitative argument that has never been presented in scholarly form

anywhere else. What is more, the absence of inferential statistics enables Diamond to indulge in some numerical sleight of hand. Was the origin of so many domesticates in Eurasia a matter of mere good fortune? I calculate (from his Table 9.2) that the probability of 13 animal species suitable for domestication occurring in Eurasia, and none in Africa, by chance alone as being around 0.003. Accepting conventional levels of statistical inference, Diamond's hypothesis is falsified; the origin of so many domesticates in Eurasia and none in Africa must have some explanation other than the one that he gives.

This doesn't mean that the general kind of argument proposed by Diamond is irredeemably flawed; far from it. And I have deliberately picked upon Africa, the continent for which Diamond's thesis is weakest. Diamond is a man with a deep love and knowledge of Australasia; it is when he considers this part of the world that his book both absorbs and convinces. Here the puzzle of unequal development is posed at its starkest. On one side of the Torres Straits is the vast landmass of Australia, inhabited for at least 40,000 years by a people who never developed any form of agriculture and a hunting technology no more complicated than the woomera, a device for throwing spears. On the other side, merely 10 miles away, lie the islands of the New Guinea archipelago, inhabited by peoples who had gardens, pigs, pottery and bows and arrows. There was plenty of contact between the Australians and the New Guineans, yet the only New Guinean technology that diffused far into Australia were fish-hooks made of shell. This, Diamond explains, is because the ephemeral and inhospitable climate of Australia was simply unsuited for New Guinean farming methods; even the islands closest to Australia were but feeble outposts of a sophisticated farming culture that flourished on New Guinea itself. Since Australia is the smallest and most biologically depauperate of the continents (bar Antarctica), the raw materials upon which to base a native agrarian or pastoral society simply were not there, and so the Aborigines stalled in the stone-age. This argument, if correct, is profoundly important, for the Aborigines, more than any other people, have long suffered the suspicion of being a slightly wayward branch of *Homo sapiens sapiens*. Molecular genetic data show that they are, in fact, much more closely related to the Chinese than Europeans are. Diamond has now explained how these peoples, distinct for only 50,000 years, came to occupy the opposite extremes of social and technological organization.

In the final chapter of his book, Diamond sketches a science of human history. He is well aware that the causal motors of traditional history: politics, culture, economics do, at some level, at some times, matter. It is just that he thinks that these are best left to explain the residuum of events not explained by biogeography. So, how much is left? When does History begin? Well,...never. But in fact he seems to have never met an historical event not

explained by geography. In the early 15thC China mounted a series of long-range trading voyages under the command of the daring eunuch, Admiral Zheng He. It was an enterprise that dwarfed the later European voyages of exploration, and the Chinese fleet got as far as Malindi in East Africa, possibly even further. The halt of these voyages after 1433 was, it is often said, one of the great contingent events of history; had not Neo-Confucian anticommercialism and xenophobia prevailed at the Ming Court, or had not the Imperial exchequer run dry, global history would have been quite other than it was. At least so the Sinologists say. Diamond, however, just sees coastlines. The coast of China has few bays, islands and peninsulas; had it been as bumpy as Europe's, Diamond says, then China would have been a host of states rather than a unified empire; the eunuch admiral could have shopped about for another princely patron (rather like Columbus) instead of languishing on the beach, and Europe might well be a Chinese colony yet.

The causal fragility of this argument leaves one breathless, as does the swiftness with which a general historical law is conjured out of a single comparison. Even if bumpy continental coastlines are an ultimate cause of global maritime empires, how would we know? It is a case of history having been stingy, as it so often is, with natural experiments. This, more than anything else, necessarily limits a science of history, for when causes are sought for unique events, as they so often are, only one-damn-fact-after-another narrative remains. It's why historians do what they do. But enough. A new science of history deserves nurturing at birth rather than stifling, and *Guns, Germs and Steel* deserves reading, above all, for the sheer audacity of purpose and clarity of thought which Jared Diamond brings to the cause of historical explanation. And then, this book explains, perhaps better than any other, just how the most remote and unpromising of peoples can, in the fullness of time, acquire at least a veneer of civilization:

They barely concealed their nakedness with a few animal skins. The women of a district belonged to all the men therein. Their houses were huts made of reeds, and their ornamentation was figures which the men and the women imprinted on their skins by pricking it and pouring the juice of herbs upon it, as is yet the practise of the savages of America.

As Voltaire reminds us, even the English were humble once.