

Born Capitalist: Free Markets and Hominid Evolution

by Robert E. Wright

The generic term for bipedal apes, including *Homo sapiens* or modern humans, is hominid. Since the publication of the first edition of Charles Darwin's *On the Origin of Species by Means of Natural Selection* in 1859, scholars have often speculated when, where, and why hominids diverged from their chimpanzee-like cousins. They wondered what environmental factors would have created selective pressures in favor of hominid traits, like bipedalism, a relatively high brain-to-body ratio, and sophisticated use of language, and away from ape characteristics such as arborealism, knuckle walking, and relatively small brain-to-body ratios and limited communication capabilities. Often, scholars sought the one key attribute that separated hominids from apes and other types of creatures. The hope was that if a special or unique characteristic could be identified and explained, discovering the causes of other hominid characteristics would be greatly simplified.

The key-characteristic strategy was not inherently flawed, but until recently it has always fallen flat. Hominids are not the world's only bipeds, toolmakers, or masters

of communication. But it turns out that hominids do exhibit a unique behavior, one *never* observed elsewhere in the animal kingdom. Hominids regularly engage in the exchange of goods and services with non-kin members of their own species. In short, hominids have come to rule the earth because they exploited a latent yet extremely powerful feature of the environment as yet undiscovered by other creatures, the free market.

Decades and perhaps centuries of further research will be necessary before we will know all the details. Thanks to recent research by Haim Ofek and others, however, the general outlines of hominid evolution can now be sketched.¹

The story starts in Africa between 5 and 8 million years ago, with the last common ancestor (LCA) between humanity and its closest living relative, the chimpanzee. Due to a climatic change, some of the LCA began to inhabit a less wooded, more open range. Others continued to live in the forests, where they encountered selective pressures that led to the evolution of two species of chimpanzee. The grassland LCA, however, encountered very different selective pressures, including increased predation. Evolution favored behavioral changes that led the LCA to join together in large, baboon-like troops. The grassland environment also caused selective pressures for physiological changes that led away from knuckle-walking and toward bipedalism. Walking on two

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legs, though inferior to pure quadrupedalism, was, in open country, far superior to chimp-like knuckle-walking.

At that point, our ancestors, known today as australopithecines, were little more than upright apes who behaved something like baboons. But the two major elements necessary for the discovery of private property and the power of trade—free hands and frequent interaction between non-kin—were in place. (A sufficiently high level of consciousness, of course, was also required.) *Australopithecus* was a successful genus that survived several million years and spawned several species, including at least one of “robust” herbivores analogous to gorillas and at least one of “gracile” omnivores that probably engaged in a chimp-like foraging strategy that included the gathering of fruits, nuts, and other vegetable matter and the hunting of small game ranging from termites to small mammals. The gracile australopithecines, the most famous of whom is “Lucy,” undoubtedly used tools, like conveniently shaped sticks and rocks, and may have even constructed crude tools like the “termite sticks” produced by some groups of chimpanzees.

The Birth of Property?

Unlike chimps, however, australopithecines did not use their hands for locomotion. If “Lucy” found a stick or stone that was particularly useful, therefore, she did not have to abandon it before moving to new foraging grounds. She could appropriate it for her own use. Private property was born, but, given the foraging strategy of the species, no australopithecine could afford to amass much. We can imagine that each might have carried one or at most two prized tools about with him. Maybe one carried a particularly long, stout, pointy stick good for fending off leopards, while another lugged around a rock with a sharpened edge that came in handy when butchering game, and a third bore a club-like branch ideal for bopping snakes and small mammals on the head.

Such specialization made trade both possible and profitable. The club carrier smashes

the skulls of a few rodents. The stone carrier butchers the rats and throws a hunk to the spear bearer for watching their backs. Even a rudimentary division of labor such as this would create tremendous benefits, including decreased predation and increased food consumption. Those intelligent enough to trade such services, therefore, would be differentially selected by nature for reproduction. Moreover, the shrewdest traders would enjoy even higher reproductive success. The bright spear bearer who demanded more rat hunks as the threat from leopards increased, for instance, would be more likely to survive and reproduce than the dull spear bearer who accepted mere scraps in exchange for frequent fights with the deadly cats.

The emergence of property rights, specialization, and free markets nicely explains the appearance of *Homo habilis*, a species that could take trade and specialization a step further than *Australopithecus* because at least some individual *habilis* possessed enough brainpower to create crude stone tools. Their social structure and foraging strategies are still largely a mystery to scientists, but most agree that they at least scavenged the bones of large mammals, using their crude stone tools to obtain the nutrient-rich marrow found inside. Their relatively large and hence metabolically expensive brains necessitated access to bone marrow and hence to stone tools. Crude as the tools were, their creation was not easy, given the still modest brain-to-body ratio of the species. So it is likely that some specialized in the production of the tools, while others specialized in the scavenging of bones, with trade linking the two groups. Again, trade would have driven the need for larger, shrewder brains, since clearly those who cut the best bargains would have enjoyed the highest reproductive success rates.

Trade in fire may be one of the oldest professions. Indeed, the fire trade can explain the evolution of *Homo erectus*, the second major species of hominid. Fire, a chemical reaction, is an extremely interesting commodity because it was not, given the technology available to Paleolithic hominids, easy to create or maintain. Yet fire could be

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traded without reducing the inventory of the provider. It is likely that small groups of *erectus*, and later *sapiens*, specialized in the maintenance of fires. Ample archeological evidence suggests that they set up shop in caves in wooded areas, carefully nurturing several hearths used to kindle fires for other groups in exchange for food, skins, and other resources. Trade allowed the fire keepers to concentrate on maintaining the all-important fires, while simultaneously freeing the other groups to specialize in food and resource acquisition. As the fire keepers were essentially providing a service, maintenance of fire, rather than a commodity, it would have made little sense for non-kin to simply kill them and "steal" the fire. Even rival fire keepers would not have much incentive to kill other fire keepers, save perhaps to appropriate their caves, because the high transportation costs and homogenous nature of fire would have made the markets for the fire purely local, analogous to roadside inns.

The seemingly ubiquitous threat of physical violence has led some observers to doubt that trade between non-kin could ever take hold. After all, the argument goes, why not simply kill the counterparty and take his stuff? That undoubtedly happened, as it does to this day, but ignores the fact that the would-be victim would fight back and kill the attacker. Moreover, even if the raid were successful, members of the victim's family might retaliate. In addition, as noted, such arguments ignore the fact that trade involving exchange for services would give others, even non-kin, an incentive to maintain the life and health of the other party. Finally, such arguments ignore the mechanism of "silent trade," which might be better termed "asynchronous trade."

Silent trades are exchanges that take place between enemies, potential enemies, or strangers in a common location but at different times. Trader A leaves goods in a location Trader B frequents. Trader B can ignore the offer, signaling that he finds no value in the goods. Or he can take the goods and leave behind his counteroffer. If Trader A does not like the terms of the trade, trade ceases. If Trader A likes the terms, he can continue to trade. If Trader B simply absconds with the goods, Trader A may attempt to take physical retribution against Trader B or simply accept the loss. Presumably, Trader A would not put a large portion of his wealth at stake and in fact would most likely attempt to trade away goods with the least value to him, like remains of a carcass likely to rot anyway. Clearly, silent trade is not the most efficient market institution, but it does allow for enemies or strangers to reap the gains of trade.

The centrality of trade in hominid evolution explains much about the behaviors of modern *sapiens*, including our intelligence and shrewdness. Our brains are biologically expensive organs. We can biologically afford to feed them, ironically enough, because compared to other mammals, hominids have small guts. As our digestive systems shrank, more biological material was available to create and fuel our brains. The tradeoff of this arrangement, of course, is potential starvation. The evolution of subcutaneous fat reserves helped somewhat. By allowing food resources to flow from more to less productive areas, trade also helped to mitigate the risk of starvation. Moreover, as we have seen, trade and specialization increased the total resources available to our ancestors. Through both mechanisms, it became biologically possible to fuel large brains at the

same time that larger brains were needed to carry out specialized tasks and to bargain effectively.

Smith Right Again

So, as usual, it appears that Adam Smith was correct. We *are* born with “the propensity to truck, barter, and exchange one thing for another,” and to do so under free-market conditions. It is little wonder, therefore, that most of us chafe under socialism and extensive government regulation. Our ancestors who were good traders were more likely to live and reproduce than those who were poor traders or those who allowed others to dictate the terms of trade.

Despite its obvious predictive power, the view that hominids evolved to become the consummate traders is relatively new. Scholars have only begun to scratch the surface of this compelling hypothesis. Moreover, much established scholarship needs to be redone, or at least reconsidered. One of the most ubiquitous myths that needs to be tackled is that groups of *sapien* hunters and gatherers were communal if not outright communist. None other than Marx and Engels are responsible for the proliferation of this perfidious fallacy. That duo of course wanted to convert the world from capitalism to communism, so it made rhetorical sense for them to cast “primitive” social groups as communal. For over a century, Marxist-leaning social scientists dutifully followed Marx and Engels’s lead and expanded on the myth until the communal attributes of “primitives” became almost axiomatic.

Recently, however, legal scholars and evolutionary psychologists have exploded the myth. More work will have to be done to completely expunge social science of this powerful chimera, but the case studies completed to date have provided spectacular examples of the flaws of the communist myth. For example, George Mason University Law Professor D. Bruce Johnsen has shown that Indians of the northwest coast of North America (today Washington state and British Columbia) were essentially capitalists.² Left-leaning scholars have long upheld

the Northwest Coast Indians’ (NWC) “potlatch” system as a prime example of primitive communism. The potlatch system was characterized by the “ritual destruction of property” and reciprocal “gift-giving,” hardly attributes of an advanced market economy.

On closer inspection, however, more sober scholars noted that the reciprocal gift exchanges were actually loans of resources repaid with interest and that the ritual destruction of property was analogous to the destruction of a promissory note after a loan is repaid. The NWC, in other words, possessed a capital market. More intriguing still, the NWC did not stumble on an ecological paradise filled with tasty salmon. They created their paradise by establishing and protecting private property rights in salmon. In effect, they were able to selectively breed salmon, almost domesticate them, by exploiting the genetic propensity of salmon to return to the place of their birth for breeding. By controlling a stream to its head, groups of NWC effectively owned and controlled their own school of salmon, allowing them to “pasture” in the ocean. (The descendants of the NWC embrace this capitalistic interpretation of their past because it bolsters their legal claims to restitution.)

Capitalist !Kung

Leftist scholars also grossly mischaracterized the !Kung, a hunter-gatherer tribe in Africa known more commonly as the Bushmen of the Kalahari Desert. Scholars wrapped up in the radical *Zeitgeist* of the 1960s portrayed the !Kung as noble savages with a peaceful, communal social structure and antimaterialistic values. Irven DeVore of Harvard University, co-leader of the 1960s !Kung project, now acknowledges that “we were being a bit romantic.” “Our assumptions and interpretations were much too simple,” he now admits, “but that was probably inevitable given the social and intellectual context within which we were working.”³

Younger scholars, for whom the 1960s are ancient history, provide an even harsher assessment. They claim that the project lead-

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ers did not really understand the !Kung language well enough to complete the study by interviewing tribespeople. Moreover, the !Kung project leaders closed their eyes to important evidence contrary to their thesis. Yet the !Kung, or rather the misconception of the !Kung, became *the* model of early hunter-gatherer societies, extant and extinct.

In fact, tribes or bands of hunter-gatherers are best seen as firms—that is, groups of people that strive toward a common economic goal. An alien anthropologist plopped down in the middle of General Electric might think he had discovered a communist paradise. The members of the firm help each other all day long, yet no money passes between them. They eat, drink, smoke, and socialize together. Sometimes tensions arise, but usually the “tribe” hums along nicely. What a communist paradise GE seems until the alien anthropologist comes to see that the “tribe” is simply one of many groups attempting to gain control over scarce resources.

Historians too have read their own radical desires into the past. For instance, college undergraduates are still taught that early Americans were largely communal, uninterested in wealth accumulation, private property, and markets. Yet evidence to the contrary abounds. Perhaps someday soon

American farms will be understood for what they were, business firms, and American farmers will again be placed on an even footing with Indians and bushmen.

Humans do not need to study economics formally to be rational consumers because the basic tenets of shrewd trading are ingrained in their DNA. This is not to argue, of course, that formal education in economics is unneeded. But it does help to explain the seeming paradox that the world’s largest and most efficient economy is composed of people with an appalling lack of economic education. We are also genetically predisposed to understand the intricacies of language. Why is it, then, that formal education is geared so much toward literature and so little toward economics? □

1. This essay is based on: Christopher Badcock, *Evolutionary Psychology: A Critical Introduction* (Malden, Mass.: Blackwell Publishers, 2000); Jared Diamond, *The Third Chimpanzee: The Evolution and Future of the Human Animal* (New York: HarperCollins, 1992); Alexander Field, *Altruistically Inclined?: The Behavioral Sciences, Evolutionary Theory, and the Origins of Reciprocity* (Ann Arbor: University of Michigan Press, 2001); Haim Ofek, *Second Nature: Economic Origins of Human Evolution* (New York: Cambridge University Press, 2001); Richard A. Posner, *Behavioral Law and Economics: A Critique*, *Economic Education Bulletin*, American Institute for Economic Research, August 2002.

2. D. Bruce Johnsen, “Customary Law, Scientific Knowledge, and Fisheries Management among Northwest Cost Tribes,” *N.Y.U. Environmental Law Journal*, 2001.

3. Quoted in Roger Lewin, “New Views Emerge on Hunters and Gatherers,” *Science*, May 27, 1988, p. 1146.