

A Troublesome Inheritance Nicholas Wade

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Nicholas Wade is a science writer, not a scientist himself. His genius is to survey what is going on on the frontiers of science, collect reports from many different frontiers, and compile a composite picture of what is happening in the world.

This is ostensibly a book about the science of human evolution. Whatever its intent, it will be treated, or rather, egregiously mistreated, as a political screed. The era of free scientific inquiry which began with the Enlightenment is pretty much at an end. Most scientific questions of our age - global warming, the nature of human sexuality, and certainly human evolution - have implications for public policy. Powerful interests have a vast stake in the status quo. Wade is like Galileo challenging the Pope or Darwin challenging creationists. Government is the establishment church of our era, with acolytes in the educational establishment and the press. Wade has to believe fervently in the truth to summon the bravery to challenge them by writing this book.

Wade is self-aware. Rather than adopt the stance of a disinterested scientist, he acknowledges the abuse he expects, from which quarters, and why. He inoculates himself in two ways. First, he goes into great detail with regard to the treatment meted out to the sociobiologists and intelligence researchers by government, academia and the press. Secondly, quixotically, he has chosen to attack some figures like Stephen Pinker who would seem most support his arguments, and laud the expertise of others like [[ASIN:0307719227 Acemoglu and Robinson]] who are politically correct down to their toenails. He seems to be claiming, "See, I'm one of you." I can guarantee him, this puny amulet will not ward off the witch hunters. He would have been better not to try.

His topic is human evolution, and especially, the implications of the past couple of decades' research in genetics. His main points are:

(1) There is genetic validity to the traditional classification of mankind into five continentally-based races. The dates at which the breeding populations separated can be fairly well established. A small band left Africa about 50,000 years ago. Some of them arrived in Australia 46,000 years ago, after which they remained isolated. They founded the New Guinea/Australian race. Others headed north into the heart of Eurasia, splitting 30,000 years ago into Europeans and East Asians. Amerindians form the fifth major race: they split from the East Asians about 15,000 years ago. These findings confirm work done some decades ago by [[ASIN:0520228731 Cavalli-Sforza]] and [[ASIN:0812971469 Spencer Wells]] using more primitive means.

(2) Humans have evolved more dramatically in latent characteristics, their temperament, intellect, aggressiveness/passivity, and work ethic, than in their visual characteristics. He draws useful comparisons with the evolution of our domestic animals. Moreover, the genome co-evolves with culture. The Chinese genome is adapted to Chinese culture, for instance. Wade has a highly useful chapters on the Jews, drawing mostly from [[ASIN:0465020429 Harpending and Cochran]], though (to my surprise) not [[ASIN:0595228380 Kevin MacDonald]].

(3) Human evolution accelerated after the exodus from Africa. Darwin's theory of evolution posits that changes in environment put selection pressure on any species, favoring some alleles over others. Inhabiting cold climes, collaborative hunting, and warfare using weapons placed immense evolutionary pressure on Homo sapiens hunter/gatherers.

(4) Evolution accelerated even more after the invention of agriculture. Hunter/gatherers had lived in communities of up to 150 people, not many more than our chimp-like ancestors of five million years back. All of a sudden we began living in cities, engaging in trade, specializing as craftsmen, and organizing large-scale governmental structures and wars. The cognitive and social skills required were immense, as was the selective pressure.

Some exciting science that is new to me with this book is Wade's identification of genes that are under significant selective pressure today. There are about 200 genes in each of the major racial groups: Europeans, East Asians, and Africans. Only a few of them overlap: for the most part, evolution is following a separate path within each race.

"How can you know?" is the big question. Geneticists are generally confined to the DNA of living people. Wade's discussion of the way the genome evolves is scientific deduction at its best. Groups of physically adjacent genes are generally passed on as a group. If one of them is beneficial, the others come along as free riders. Measuring the incidence of free riders points scientists to the genes under selection.

Wade advances the novel theory that there have been two breakthroughs in evolution over the course of our civilized history: the move to settled habitations, and the industrial revolution.

Settlement is generally agreed, although Wade adds some interesting detail. We began sedentary life about 15,000 years ago, well before the beginning of agriculture and pastoralism. There were advantages to living together, but it took a lot of evolutionary time for the genome to change enough that we could live and work together to the extent required for the next step.

Building up to the industrial revolution, Wade draws extensively on the work of economic historian Gregory Clark of the University of California at Davis. Clark's research into historical records in England reveals that violence decreased systematically and markedly during the decades from 1200 to 1800. In this he echoes [[ASIN:0143122010 Stephen Pinker]]. At the same time, the general levels of intelligence rose. First, richer people had more children. Second, because population was static, those people regressed in social status, bringing their intelligence down to the common ranks. Third, literacy and other indirect measures of intelligence grew steadily.

Though Wade documents this phenomenon in England, he implies that it happened as well throughout Europe. The mechanisms in East Asia were different - the Mandarin system of competitive examinations, among other things - but the result was similar in terms of intellect. The result in terms of culture and temperament -related factors - was different in Asia, a topic Wade investigates towards his conclusion.

There is much more to say, but readers weary of excessively long reviews. I've posted comments with other observations for those who are interested.