

## THE SOCIAL CONQUEST OF EARTH

Edward O. Wilson, in *The Social Conquest of Earth* (331pp, W.W. Norton, 2012) leaves no doubt that, for him, humans are animals driven and shaped by evolution through natural selection. Throughout he bases his assertions on the latest scientific research, his own and many others. Neither religion, philosophy, nor the arts, powerful as they are, can explain human nature. Only science, not just another way of knowing, but the only means, Wilson says, to tell truth from falsehood, can explain why advanced social life exists, and what forces created it.

To cement the point of our animal nature, Wilson talks about the two social conquerors of earth – ants and men.

Leafcutter ants, the most socially complex species other than humans, practice agriculture in air-conditioned “cities.” They are truly social -- altruistic in defense of nests and sharing tasks across generations and castes. Some cut and carry leaves, others chew them into mulch, fertilize them with their feces, and on this grow their principal food, a fungus found nowhere else. They do this on an assembly line, with specialized castes devoted to each process. Such social organization has allowed ants to occupy a huge range of ecological niches, with the result that they may outweigh all vertebrates, including humans, by a ratio of 4-1. Evolutionary success indeed!

Yet no matter how many more millions of years they may thrive, ants will never develop bodies large enough to control fire, or brains big enough to write a symphony.

Perhaps near the apex of their evolution, they remain robots.

So why spend a third of the book talking about ants? Because the key to the origin of the human condition, Wilson says, is to be found in the evolution of animals. And ants have followed an evolutionary path to success much like humans.

Homo sapiens is the only mammal to have taken all the required turns in the evolutionary maze. We evolved through genetic mutation and selection due to environmental pressures. But human nature is not a product of our genetic code or of cultural universals alone, but of the “rules of development prescribed by genes, through which the universals of culture are created.”

Like the ants, we formed groups which defended a home place, experienced mutations that prevented dispersal, and environments that shaped group interaction. As Wilson says, “hereditary altruists form groups so cooperative and well organized as to out compete non-altruist groups.”

Yet our genetic code is a contradiction. One part favors individual success, the other, group success. Individual selection yields “sin” and group selection, “virtue.” But the genetic rule is, selfish individuals beat altruistic ones, and altruistic groups beat selfish ones. And neither can ever win over the other, else groups would dissolve or, alternatively, we’d become robots like the ants. Thus “relentless ambivalence and ambiguity are the fruits of the strange primate inheritance that rules the human mind.”

Ants, in their millions of years of evolution, came to live in balance with the rest of life. Homo sapiens, evolving in mere thousands of years, have never achieved this. Instead,

we became the great destroyers, killing off our rivals the great mammals and then, with agriculture, wiping out whole habitats in a manner never seen before in nature.

“Our instincts still demand the tiny, united band-networks that prevailed during the hundreds of millennia preceding the dawn of history. Our [Paleolithic] instincts remain unprepared for civilization.”

Driven by ancient and hardwired rules, the co-evolution of genes and culture, we've created a Star Wars civilization, with Stone Age emotions, medieval institutions, and god-like technology.

Yet near the end scientist Wilson suggests that we could have an earthly paradise by 2200, and that continued evolution could yield individuals of unsurpassed beauty and genius.