

The Kingdom of Speech  
Tom Wolfe

A great storyteller gives a brief, fascinating account of research into a great natural mystery.

Tom Wolfe is a storyteller. His incisive analysis of American society has been a fixture since the 1960s. Books I have read of his include *The Kandy Kolored Tangerine Flake Streamline Baby*, *The Electric Cool-Aid Acid Test*, *Radical Chic and Mau-Mauing the Flak Catchers*, *The Painted Word*, *The Right Stuff*, *The Bonfire the Vanities* and *A Man in Full*.

Now, 85 years old, he is still at it. Ever the storyteller, he delivers riveting vignettes from the history of science, of course with his own patented brand of hyperbole. It is always entertaining.

He sets up each scientist in turn, only to generally tear them down in a later literary twist. Charles Darwin, Thomas Huxley, and Noam Chomsky are built up and then somewhat deflated.

His ultimate message remains obscure until the very end of the book which concludes: "Speech! To say that animals evolved into man is like saying that Carrara marble evolved into Michelangelo's David. Speech is what man pays homage to in every moment he can imagine." Speech is so marvelous he cannot fathom how it might have evolved. If it didn't evolve, where did it come from? It appears to be a roundabout appeal to the existence of a divine creator.

He starts his discussion by framing Charles Darwin's society and times. Darwin had the English gentlemen's leisure to piddle around with whatever projects captured his fancy. Darwin had been working on his theory of evolution for 20 years, publishing nothing.

Then, zap! A bolt out of the blue. Alfred Russell Wallace, a nobody collecting zoological specimens on the far fringes of the British Empire, sends Darwin an unsolicited manuscript describing evolution. Wolfe portrays the moral dilemma that this presented to Darwin, and rather unsympathetically analyzes the compromises he made to get around it. It prompted him to write "[[ASIN:B008478VE8 *On the Origin of Species* ]]" in record time in order to claim primacy. It worked out fairly well in the end; Darwin's patronage and status in society assured that Wallace got more recognition than he might have had he indeed been able to publish first.

The age was ripe for such a book. Enlightenment men wanted to be free of religious dogma such as the virgin birth and the various biblical miracles. However, few were brave enough to directly challenge the clerical authorities. *Origin of the Species* had clear implications for the origins of man, but Darwin attempted to dodge the issue putting only one innocuous sentence right at the end of the book: "In the distant future I see open fields for far more important researches. Psychology will be securely based on a new foundation, that of the necessary acquirement of each mental power and capacity of gradation. Light will be thrown on the origin of man and his history." That single passage raised a storm of howls from the church. Paradoxically, it cemented Darwin's standing among the freethinkers, Thomas Huxley among them, and made him look a bit braver than Wolfe believes he was.

Wolfe does not go into what was going on and other realms of science in this age. It was a vast age of discovery in the fields of electricity and magnetism, physics, astronomy, and chemistry. The age was ready for Darwin and found people, calling themselves the X-club, ready to support him.

Wolfe chronicles the development of the Theory of Evolution and its eventual embrace of Gregor Mendel's experiments with genetics through the work of Dobzhansky. It should be evident that the two are compatible, as both deal with differences in individual traits among offspring of the same parents.

Wolfe gets in over his head discussing statistics and (supposedly) calculus in the science of glottolinguistics. He presents a seemingly opaque equation which is no more than a statistical correlation, one which would be absolutely essential and comparing to similar languages or one language to its precursor in another point in time. Such studies have been

quite useful to people like Luigi Cavalli Sforza in [[ASIN:0520228731 Genes, Peoples, and Languages]] in determining the evolution of individual languages and language families, a topic that Wolfe does not go into.

In his introduction of the complex character Noam Chomsky, Wolfe exaggerates the plight of Russian Jews under the last of the czars. Reading Solzhenitsyn [[ASIN:5969707023 Two Hundred Years Together]] and Slezkine [[ASIN:B005646E32 The Jewish Century]], it is clear that the czars simply never knew exactly what to make of the Jews, and that whatever policies they made turned out to work at cross purposes and be largely ineffectual. Chomsky's ancestors mostly would have come to America for the same reason as everybody else did – opportunity.

Wolfe waxes at length about Chomsky's liberal/radical roots, and writes admiringly about his courage in tackling the Vietnam War. Chomsky was indeed right on that, and right to indicate that Vietnam was a sign that America was on an unfortunate path. What Wolfe does not mention is the milieu of cultural Marxism in which Vietnam was set, another vector of directions that have proven detrimental to American society. Bottom line: Chomsky proved to be right, but being skeptical of Chomsky was not an unreasonable stand.

Wolfe gives a wonderful account of Chomsky's absolute demolition of BF Skinner's theory of behaviorism. The idea that language is a learned behavior is several orders of magnitude too simplistic. What he does not say is that Skinner's views were in political favor. The Soviets and the American New Dealers all wanted to believe in a blank slate – the theory that a child was totally the product of environment, heritability playing no part. Chomsky advocated that language facility is inborn, and thus must be a product of inheritance.

I disagree with Wolfe's suggestion that *The Origin of the Species* is not a great book. First of all, it was very readable to me even as a child in 1958, and again two years ago. Secondly, although not all the thoughts were original with Darwin, most was, and he put them together in well thought out sequence that deserves credit. Although he rightly shared credit with Wallace, the fact is that Darwin had been playing with the ideas far before Wallace thought of them.

With regard to the worth of [[ASIN:B004TS0PQS The Descent of Man]] I am more in agreement with Wolfe. *The Origin of the Species* pretty much covered the ground, and Wolfe is correct to point out that what we have come to learn about human evolution was simply not available to scientists of Darwin's era. They didn't have the fossils, they didn't have DNA testing, and they didn't have much analysis of language at that point.

Wolfe cites several of the leading figures in language research: Chomsky of course, Steven Pinker [[ASIN:0142003344 The Blank Slate]] and Tecumseh Fitch [[ASIN:052167736X The evolution of language]]. Two he fails to mention are evolutionists Philip Lieberman [[ASIN:0393040895 Eve Spoke: Human Language and Human Evolution]] and Robbins Burling [[ASIN:B00BHGNXUU The Talking Ape]]. While it is true that speech does not fossilize, our body parts do. Lieberman makes a strong case for the physiological adjustments that our bodies had to undergo in order to accommodate speech. Our larynx and our throats had to enlarge, move down, and be available for a continuous stream of air from the lungs. This repositioning increases the risk of choking. It would not be evolutionarily advantageous unless it enabled speech.

Burling has a fairly elaborate thesis for how we develop the mental equipment required for speech. His most profound observation is that we probably evolved the ability to understand speech, decipher the intentionality of other animals, before we develop the capacity to generate speech. Not much point in talking if nobody is listening.

The third point that Wolfe does not touch on is the anatomy of speech, something that Pinker covers well in [[ASIN:B0049B1VOU The Language Instinct: How The Mind Creates Language]]. The same parts of the brain are dedicated to speech in every individual. It is not something that we acquire in a haphazard fashion. More than that, as a century of intelligence researchers such as Jensen [[ASIN:0275961036 The g Factor: The Science of Mental Ability]] have demonstrated, verbal ability is highly heritable. Wolfe writes that "Not only is speech an artifact, is the primal artifact." Not so. An individual language is an artifact, but the ability is inherited, just as Chomsky says.

The most entertaining part of the book concerns Daniel Everett, an anthropologist living with the Pirahã Indians [[ASIN:0375425020 Don't Sleep, There Are Snakes: Life and Language in the Amazonian Jungle]] deep in the Amazon. Everett got into a profound tiff with Chomsky over the universality of his "universal grammar." It turns out that these Indians lack some supposedly universals: they have no tenses and no recursion within their language. Wolfe delights in telling the story of how mean the linguists and anthropologists can be to one another. It calls to mind another famous tiff involving Napoleon Chagnon [[ASIN:0684855119 Noble Savages: My Life Among Two Dangerous Tribes]].

Wolfe discounts the fact that Chomsky shrugged Everett's challenge off and eventually simply broadened his theory. It was absolutely the right thing to do. Evidence of the heritability of language ability is strong even without the hypothesis of a universal grammar.

Speech is something of a miracle, as is all of life. Its origins have much more robustly defied explanation than most elements of Darwin's theory. Nonetheless, there has been and will be continual progress. Stay tuned.