Idea are connected in circuitous ways, and you never know when a discovery in one area will shed light on another. My new book, The Stuff of Thought: Language as a Window into Human Nature, has a chapter on swearing. My next one will be on declines in violence and their psychological roots. To my surprise, the two topics may be connected.

In all languages, taboo words refer to concepts that evoke strong negative emotions: awe of the supernatural, disgust at bodily secretions, dread of death and disease, revulsion at sexual depravity, hatred of certain kinds of people. But the particular swear vary with time and place. In traditional Catholic societies, swearing is religious: the worst thing you shout in Québecois French is Accursed tabernacle! With the sexual revolution, the f-word is not as big a deal as it used to be, but with our increased sensitivity to racism, the n-word can end your career.

With the gradual secularization of Anglo culture over the centuries, religious swearing like damn and hell lost their sting, while sexual and scatological taboo terms—the classic “four-letter words”—took their place. As the historian Geoffrey Hughes has noted, “The days when the dandelion could be called the pissabed, a heron could be called a shitecrow and the windhover could be called the windfucker have passed away with the exuberant phallic advertisement of the codpiece.” Likewise most English speakers today would be surprised to read in a medical textbook, “In women the neck of the bladder is short, and is made fast to the cunt,” which appeared in a 15th century source.

What does this have to do with violence? Contrary to the popular belief that we are living in particularly violent times, rates of homicide have plummeted over the course of Western history. A medieval Englishman was ten to a hundred times more likely to have been slain as an Englishman today. The sociologist Norbert Elias noted that this pacification process, in which people stopped stabbing each other in response to minor insults and rivalries, correlated with other changes in everyday manners. Starting in the late middle ages, people stopped blowing their noses onto the dining room table, stabbing chunks of meat with their daggers and plunging them into their mouths, urinating onto the curtains, defecating in public, and giving their eight-year-olds advice about prostitution and adultery. Taboos on causal speaking about excretion and sexuality were part of this development. He lumps these trends into a “civilizing process,” in which people increasingly exercised their superego (today we would say their prefrontal cortex and anterior cingulate) to inhibit their first impulses. The ultimate cause was the transition from feudal fiefdoms defended by honor-obsessed knights (today we would call them “warlords”) to large kingdoms ruled by central authorities and organized by complex social networks.

If this theory is right, it would be another example of how the walls between the humanities, social sciences, and natural sciences are obsolete: word usage, brain function, and medieval history are all connected.

—Steven Pinker is the Harvard College Professor and Johnstone Family Professor of Psychology at Harvard University.

Editor’s Note: An abridged version of this article appeared in the Sept. 2 issue of Seed Magazine. The original version is being published in its entirety with the permission of Dr. Pinker.
Don’t ask how many languages biolinguists speak!

By Cedric Boeckx

Etymology can be misleading. Whereas no one would nowadays think of geometry as the field preoccupied with land measurement (Greek geo-metria), most people still think that linguists must be polyglots since they take linguistics to be the study of languages. The philological tradition within linguistics arguably still is just that, but much of modern linguistics is about something quite different: it’s about the nature of our species-specific capacity to acquire at least one language, and how this rather unique faculty may shed light on what makes us human. Defined in this way, linguistics is really a part of biology. To stress this fact, linguists like myself like to use the term biolinguistics.

Biolinguists are concerned with figuring out the basic properties of the language faculty, how it matures in the individual, how it is put to use in thought and action (including communication), what brain circuits may implement it, and how it emerged in the species. In asking these questions, biolinguists try to determine which components of language are unique to language, as opposed to shared with other cognitive domains (especially those that also seem unique to humans) such as music and mathematics. Assuming that our linguistic capacity is both uniquely human and in part, uniquely comprised of language-specific mechanisms, significant conceptual and empirical issues arise concerning evolution, form, maturation, and function.

In an address delivered at the 1976 AAAS meeting, Nobel-laureate Salvador Luria said this about Biolinguistics:

“In closing, let me single out one frontier that today may seem as unreachable as Mount Everest seemed to be 50 years ago. And yet, it is exciting enough to warrant serious attention. I refer to what I may call Biolinguistics, or the biology of human language. The reason for singling out this field is two-fold. First, human language is the special faculty through which all conscious human activity is filtered; a faculty whose development may well have played the driving role in the almost catastrophic evolution from ape-kind to human-kind. And second, language alone, among the uniquely human faculties of the human brain offers to the scientist a systematic theory, the structural linguistics developed by Chomsky and his colleagues, which may be amenable to confrontation with biological data. What I mean is that formal language structure, plus some facts already known about language and brain structure, plus the advancing knowledge of brain organization provided by physiologists, hold some promise that between linguistics and neurobiology a kind of convergence may soon be possible that may provide a wedge into the biological exploration of the human mind.”

Today, in light of advances in theoretical linguistics (under the rubric of ‘linguistic minimalism’), genetics (FOXP2 and its network), developmental and comparative psychology, the evo-devo program in biology, and neuroscience, novel, more testable hypotheses are being formulated. The kind of convergence envisaged by Luria is again being actively sought by a variety of researchers working across traditional disciplines, making biolinguistics an interdisciplinary science par excellence. Soon, perhaps, we will be able to characterize more precisely the source(s) of our human nature.

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