

Basic instincts

Steven Pinker caused outrage by arguing that everything from adultery to altruism has its roots in natural selection. His work on irregular verbs still provokes hate mail

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This summer, the linguist and evolutionary psychologist Steven Pinker flew to London on the kind of mission that is all part of the job, when your job is the nebulous one of "intellectual rock star". His publishers had arranged for him to be the headline act at a gathering of senior buyers in the book trade, and his presence was intended to let a little of his glamour rub off on the rest of the firm's titles. Pinker, who has just turned 53, seems built for the limelight to an almost parodic degree, with his Roger Daltrey hair, prominent jawline, and fondness for jeans and leather boots. His latest book, *The Stuff of Thought*, revels in its mass appeal, drawing conclusions about the human brain from the cute mistakes that children make ("we holded the baby rabbits") and the rich lexicon of swearing. "Think of the transitive verbs for sex ... fuck, screw, hump, ball, dick, bonk, bang, shag, pork, shtup," Pinker writes in one typical section. "They're not very nice, are they?"

It would be a mistake, though, to infer from this that Pinker is a mere crowd-pleaser: his affable tone makes it easy to overlook how bitterly contested is the territory on which he has planted his flag. His life's goal, he says, is "the old-fashioned one - illuminating human nature". But the belief that there is such a thing as human nature, and that it is innate, has proved incendiary. The debate over evolutionary psychology gets intensely personal, and it is not uncommon for terms such as "Nazi" and "eugenics" to be thrown around. In one vicious war of words a few years ago - sparked during a debate on Radio 3, of all places - the British psychologist Oliver James called Pinker's views "wicked" and "utterly immoral", "misleading" and "dangerous".

In a sequence of bestsellers, including *The Language Instinct* and *How the Mind Works*, Pinker has argued that swathes of our mental, social and emotional lives may have originated as evolutionary adaptations, well suited to the lives our ancestors eked out on the Pleistocene savannah. Sometimes it seems as if nothing is immune from being explained this way. Road rage, adultery, marriage, altruism, our tendency to reward senior executives with corner offices on the top floor, and the small number of women who become mechanical engineers - all may have their roots in natural selection, Pinker claims. The controversial implications are obvious: that men and women might differ in their inborn abilities at performing certain tasks, for example, or that parenting may have little influence on personality.

The Stuff of Thought approaches the same topics, but less provocatively, asking what we can learn about human nature from the way we use language: a storm of controversy seems unlikely. "Although you wouldn't believe the kind of hate mail I get about my work on irregular verbs," Pinker says, over tea in the library of a central London hotel.

In *The Language Instinct*, Pinker developed Noam Chomsky's notion that the basic structures of language are hardwired into the brain. Now he looks behind language to thought itself. There is an inborn structure to the way we think, he argues, and language offers us clues to it. Take metaphor: no matter what tongue we grow up speaking, we seem to come equipped with a large toolkit of ways to think about things in terms of

other things. We talk about love as a journey, for example ("we've come a long way together"), and use space as a proxy for time ("let's push that meeting back an hour"). "Children will occasionally make errors like 'we better pack now, because tomorrow we won't have space to pack,'" Pinker says. That sentence conforms to the basic rule - thinking of time in terms of space. But according to English convention, it's wrong; adults don't go around saying it, so children can't just be parroting their parents when they make that mistake. This, Pinker argues, points towards some kind of innate cognitive machinery, predisposing us to think of time as if it were space, and to make many similar transitions from the abstract to the more concrete.

Meanwhile, various characteristics of the way we swear - when taken alongside brain-scan research - imply that cursing may involve a different area of the brain to regular speech, one connected directly to strong emotions. "It's almost a parallel language, where words switch places without regard to syntax or meaning, simply held together by some emotional thread. These expressions are absolutely baffling from the point of view of a syntactician. 'Close the fucking door': what's going on there? Or 'Holy shit'? Even the prototypical English curse, 'fuck you', is ungrammatical. It should be 'fuck yourself', " he says.

The words, spoken in amiable Canadian cadences, drift across the near-silent library, but nobody looks up.

Pinker grew up in Montreal's Jewish community in the 1960s, and it's often suggested that the linguistic battleground of Quebec must have inspired his interest in language. In fact, he says, language "as an ethnic marker" interests him little, and a bigger inspiration was the culture of argumentation: "we had something like 37 different socialist parties," he says. But, as any evolutionary psychologist is obliged to point out, there's a broader problem with any question about how his upbringing made him who he is: maybe it wasn't his upbringing, but his genes. When people ask if he got some trait from his parents, he likes to say that of course he did - the real question is how he got it from them. Parenting, he believes, counts for little in the development of a child's personality.

Pinker graduated from Montreal's McGill University in 1976, reading experimental psychology, then completed a PhD in that field at Harvard, in 1979. (He has spent the rest of his professional life in the neighbourhood of Harvard, moving to the Massachusetts Institute of Technology, then back to his alma mater.) In his student days, the radical politics of the late 1960s were on the wane - "it was after the era when you had to be radical to get a date," he says. But one legacy of that era was a deeply anti-biological view of what makes humans tick. The belief in a "blank slate", in the idea that nurture was more important than nature, was seen as a precondition for progressive social change. After all, how could change happen if people were born with their aptitudes and character traits hardwired?

The modern-day challenge to this outlook began with EO Wilson's 1975 book, *Sociobiology*, which claimed humans were innately warlike, and that men would tend to dominate women in social hierarchies. Several leading Harvard intellects accused Wilson of "biological determinism", and of joining a tradition that included "the eugenics policies which led to the establishment of gas chambers in Nazi Germany".

Pinker, still in Montreal, watched the row from afar. He doesn't subscribe to all of Wilson's conclusions, but in his polemical book, *The Blank Slate* (2002), he makes his position plain. Leftwing criticism of evolutionary psychology emerges from misunderstandings based on fear, he insists. Natural selection is morally neutral: even if men and women have evolved to be, on average, differently skilled at some specific task, that simply has no bearing on a political commitment to egalitarianism in that area. (In 2005, Pinker spoke in defence of the former Harvard president, Lawrence Summers, who resigned after speculating that the scarcity of women in maths and science might have a genetic aspect.) Nor, he maintains, is evolutionary psychology deterministic. Among the things evolution has given us, Pinker points out, is the frontal lobe of the brain, which allows learning and personality change. Men might be predisposed to sleep around, for example, but that doesn't mean they can't help it, and doesn't make it all right.

On the question of determinism, he often mentions his decision not to have children, despite two marriages and a current girlfriend, Rebecca Goldstein, a novelist and philosopher. "I've kind of exploited this, and used it as a pedagogical point," he says. Clearly, he and his partners have not been the unthinking servants of

their genes, since they chose not to reproduce. And if his genes don't like that, he has said, "they can take a running jump".

Still, a thorny problem remains. The Blank Slate argued that believing in human nature doesn't make you a rightwing anti-egalitarian. That doesn't mean, however, such a nature actually exists. How can you prove that any particular psychological trait was the result of natural selection? The accusation is that evolutionary psychologists simply construct "just-so stories", noticing that we possess certain characteristics, then speculating that they "must have" been advantageous for survival.

In a notoriously aggressive exchange in the New York Review of Books in 1997, Pinker argued this point with Stephen Jay Gould, who suggested that many aspects of language and consciousness, far from being adaptive, might have emerged by accident, as by-products of other evolutionary processes. Even if that explanation seems unlikely, the burden is on Pinker and his allies to rule it out. And it is increasingly possible to do so, Pinker insists, especially with computer simulation techniques that enable scientists to envision how evolution might have solved some specific problem in alternative ways. The fewer simple alternatives exist, the more likely it is that the trait we actually possess did indeed evolve to solve the problem in question.

There's one more deeply felt objection to the study of a universal human nature. Isn't it the case that the stuff that really matters in life - in art, and in love - isn't the traits we all share as humans, or as members of a gender, but the things that are absolutely unique to us, as individuals? "As individual people, embedded in our daily lives, of course we're interested in what makes one person different from another. We've got to hire one person and not another, marry one person and not another," he says.

"But a lot of great literature is a reflection on human nature. Shakespeare, most obviously: the reason we consider it noble and elevating for Shakespeare to do what he did - and for people to understand Shakespeare - is that he takes us out of our day-to-day obsessions. Science allows us to do that by a different route. But it's basically the same goal."

Inspirations

Roger Brown, his graduate teacher

Rebecca Goldstein, his partner

Roslyn Pinker, his mother

Stephen Kosslyn, his graduate adviser, "confidant and debating-partner"

Brian Leber, childhood friend