

How We Decide by Jonah Lehrer (*editor of Seed magazine, author of Proust Was a Neuroscientist...Columbia University...Rhodes scholar, has written for The New Yorker, Washington Post, Boston Globe. Edits Mind Matters blog for Scientific American....writes own blog...the Frontal Cortex*)

When homo sapiens first appeared, about two hundred thousand years ago, the planet was already full of creatures with highly specialized brains.

There were fish that could migrate across the ocean using magnetic fields, and birds that navigated by starlight, and insects that could smell food from a mile away.

These cognitive feats were all byproducts of instincts engineered by natural selection to perform specific tasks. What these animals couldn't do, however, was reflect on their own decisions.

They couldn't plan out their days or use language to express their inner states.

They weren't able to analyze complex phenomena or invent new tools. What couldn't be done automatically couldn't be done at all.

The evolution of the human brain changed everything. For the first time, there was an animal that could think about how he thought. We humans could contemplate our emotions and use words to dissect the world, parsing reality into neat chains of causation. We could accumulate knowledge and logically analyze problems. We could tell elaborate lies and make plans for the future.

These new talents were incredibly useful. But they were incredibly new. As a result, the parts of the human brain that make them possible; have lots of design flaws and software bugs.

When it comes to the new parts of the brain, evolution just hasn't had time to work out the kinks.

The emotional brain, however, has been exquisitely refined by evolution over the last several hundred million years. Its software code has been subjected to endless tests, so it can make fast decisions based on very little information.