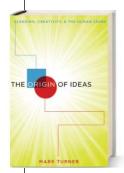
(reviews and recommendations)

books

COGNITIVE PSEUDOSCIENCE

The Origin of Ideas: Blending, Creativity, and the Human Spark

by Mark Turner. Oxford University Press, 2014 (\$29.95)



In 1908 mathematician Henri Poincaré described the creative process as a collision of ideas rising into consciousness "in crowds ... until pairs interlocked." Soon after, Gestalt psychologist Norman Maier, behaviorist Clark Hull and others began studying how ideas and behav-

iors combined, and in the 1980s, in laboratory research with both animals and people, I showed that the combinatorial process was orderly and predictable and that it could be modeled on a computer.

But toward the beginning of The Origins of Ideas, Turner, a cognitive scientist at Case Western Reserve University, claims that he and a colleague "presented the first full presentation of research on blending" just 10 years ago. Worse still, the rest of the book contains no content that a biologist or physicist would consider "research" at all. Instead Turner describes a mythical mental world of entirely imaginary objects ("webs," "scaffolds," "bundles of thought") and vague mechanisms ("mental spaces are sewn together") and then uses his fanciful model to analyze, sometimes laboriously, basic human cognitive abilities and the content of dozens of books and movies—everything from the Bible to Winnie-the-Pooh.

The concept of punishment, Turner says, is necessarily a blend of two other ideas: that someone has done something wrong and that later the offender is penalized. Almost all ideas, in fact, are blends of other ideas. Blending is the "big lever" of the modern human mind, responsible for creativity, the vast capabilities of language and our ability to conceive of other minds.

Maybe so, but how can we know that the specifics of Turner's theory are correct or that his theory is better than others? He never shows us how to tell when the processes he is describing are *not* occurring. In other words, his theory is not falsifiable, a fatal flaw in science.

In fact, Turner violates just about every rule of good science: abstract concepts are treated as if they are real things;

no aspects of the theory allow you to measure anything; it makes no specific predictions that can be tested; and so on. And then there's the tautology: blending explains creativity, Turner says, but people "create blends." See the problem?

Toward the end of the book, Turner finally gives up the farm, admitting that he is "skeptical" that experimental research on his blending model could ever be conducted. Reading *The Origin of Ideas*, in other words, is nothing like reading *On the Origin of Species*. It is more like reading Sigmund Freud's *Interpretation of Dreams*; its elegance and scope are reassuring until you realize you've been hoodwinked. At least Freudian theory had lots of sex.

—*Robert Epstein*

> WORRIED SICK

My Age of Anxiety: Fear, Hope, Dread, and the Search for Peace of Mind

by Scott Stossel. Knopf, 2014 (\$27.95)

My
Age of
Anxiety
Fear,
hope, dread,
and the search
for peace of mind
Scott Stossel

Stossel, editor of the Atlantic magazine, comes out in My Age of Anxiety as a lifelong sufferer of anxiety disorders. In this sprawling exploration of his private torment, he shares personal anecdotes that might be scenes from a sitcom. As his

wife is in labor with their first child, Stossel, overcome by anxiety, faints by her side. As a houseguest at Hyannis Port, he flees from an overflowing toilet (a result of his nervous stomach) wearing only a sewage-soaked towel and bumps into John F. Kennedy, Jr.

In Stossel's mind, these are more than passing embarrassments, but rather evidence of his tenuous value as a human being. "I feel I am living on the razor's edge between success and failure, adulation and humiliation—between justifying my existence and revealing my unworthiness to be alive," he writes.

One in seven Americans has an anxiety disorder, making it the most common officially classified mental illness. Stossel's is a text-book case of anxiety pathology, from a specific phobia at age six (fear of vomiting), to social phobia at age 11, to panic disorder in his late teens and,

later, to agoraphobia and depression.

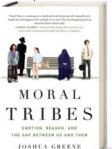
In an effort to understand his condition, Stossel surveys the latest science behind anxiety and finds many leads but few definitive answers. An overactive amygdala, low serotonin and dopamine levels, early childhood experiences and a handful of genes have been implicated, but none consigns a person to unhealthy anxiety. He discovers, for instance, that he has a variant of the SERT gene that some studies have linked to higher rates of anxiety disorders but only when combined with life stress.

The ancient Greeks debated whether anxiety was a medical illness (Hippocrates) or philosophical disharmony (Plato), a division still seen between today's psychopharmacologists and cognitive-behavior therapists. With the advent of new drugs in the 1950s, however, anxiety was increasingly advertised as a biological glitch to be repaired. Stossel chronicles the fascinating, often haphazard, development of antianxiety medications, noting that "every time new drug therapies come along, they raise the question of where the line between anxiety as psychiatric disorder and anxiety as a normal problem of living should get drawn."

Decades of medication and therapy have offered Stossel only partial relief, and this book is his way of making peace with a problem he may never leave behind. He carefully—you might even say anxiously—considers his subject from all angles. His exhaustive research spills over into lengthy footnotes, and occasionally the book feels scattered and searching. Even in the last chapter, "Resilience," he does not sound hopeful; he has found more questions than answers—but he has survived yet again.

—Nina Bai

> ETHICAL CONUNDRUMS



Moral Tribes: Emotion, Reason, and the Gap between Us and Them

by Joshua Greene. Penguin Press, 2013 (\$29.95)

We begin on a serene pasture inhabited by a tribe of shepherds. Motivated by personal wealth, one by one the herders

begin adding more sheep to their individual flocks. Soon enough the once lush meadow is overrun, and ultimately the sheep destroy it. Such is the tragedy of