

The Ape that Understood the Universe

The Ape that Understood the Universe is the story of the strangest animal in the world: the human animal. It opens with a question: How would an alien scientist view our species? What would it make of our sex differences, our sexual behavior, our altruistic tendencies, and our culture? The book tackles these issues by drawing on two major schools of thought: evolutionary psychology and cultural evolutionary theory. The guiding assumption is that humans are animals, and that like all animals, we evolved to pass on our genes. At some point, however, we also evolved the capacity for culture – and from that moment, culture began evolving in its own right. This transformed us from a mere ape into an ape capable of reshaping the planet, traveling to other worlds, and understanding the vast universe of which we're but a tiny, fleeting fragment.

Steve Stewart-Williams is an associate professor of psychology at the University of Nottingham Malaysia Campus. His research and writing revolve around the idea that theories from evolutionary biology can shed light on the human mind and behavior, focusing especially on sex differences and altruism. He also has a long-standing interest in the philosophical implications of evolutionary theory. His first book, *Darwin, God and the Meaning of Life*, was published in 2010 by Cambridge University Press.

Praise for *The Ape that Understood the Universe*

In *The Ape that Understood the Universe*, evolutionary psychologist Steve Stewart-Williams provides a masterful account of how the mind and culture evolve. Stewart-Williams is an exceptionally good writer, a witty and learned guide through challenging but exciting terrain that includes psychology, biology, anthropology, philosophy, and animal behavior. *The Ape that Understood the Universe* is a rare accomplishment: equal parts intellectual exhilaration and beautifully crafted narrative. Read this book for its literary grace, and learn along the way why you are an ape that can understand the universe.

—Todd Shackelford, Oakland University

A great introduction to human nature – whether you're a member of our species or an alien scientist puzzled by this planet's dominant life form. Stewart-Williams shows how genes and memes entwine to explain our deepest concerns and our highest aspirations. This fun, easy-going, science-savvy book will make you smarter about your emotions, your relationships, and your society.

—Geoffrey Miller, author of *The Mating Mind*, *Spent*, and *Mate*

This is a highly imaginative (and solidly informed) book about the nature of human nature – who we really are. Stewart-Williams has a firm grip on the latest data in evolutionary psychology and cultural evolution, all elegantly woven into a fine narrative packed with provocative (and astute) ideas. It's an insightful, accurate and refreshingly amusing read.

—Helen Fisher, author of *Anatomy of Love* and *Why Him? Why Her?*

Cambridge University Press
978-1-108-73275-8 — The Ape that Understood the Universe
Steve Stewart-Williams, Foreword by Michael Shermer
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An eloquent and elegant exploration of human nature in the light of evolution, illuminating many modern social and political dilemmas.

—*Matt Ridley, author of The Red Queen and Nature via Nurture*

If you hate the idea of selfish genes, this book should change your mind. With vivid examples and fascinating evidence, Stewart-Williams provides a powerful challenge to the “culture is all” lobby. The best update of the gene’s-eye view I have seen for a long time. This book will turn your view of human nature inside out and upside down.

—*Susan Blackmore, author of The Meme Machine and Consciousness: An Introduction*

In *The Ape that Understood the Universe*, Steve Stewart-Williams takes the reader from first principles to a deep understanding of the evolutionary and cultural underpinnings of human behaviour. Not only has Stewart-Williams produced a work of deep understanding, he has also produced one which is a real page turner. A twenty-first century successor to *The Selfish Gene*.

—*Lance Workman, co-author of Evolutionary Psychology: An Introduction*

Although there are many books covering evolutionary approaches to the human mind and behaviour, this is one of the best, in terms of its choice of topics, insightful coverage, knowledge of the subject-matter, and quality of writing. I enthusiastically recommend it both to those familiar with the area and to newcomers.

—*John Archer, University of Central Lancashire*

This is a fantastically comprehensive, clear, and highly entertaining sweep of every important facet of evolutionary psychology. It does something other books do not do: It presents the opposing arguments to various evolutionary theories and then objectively lays out the evidence for why they don’t hold up. If you want to debate the evolution deniers, this is the book for you. I loved this book and highly recommend it to anyone who wants to understand evolutionary psychology or understand it far better.

—*Amy Alkon, science-based syndicated columnist and author of Unf*ckology: A Field Guide to Living with Guts and Confidence*

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The premise of Steve Stewart-Williams' magnificent contribution to the scientific study of human nature – an anthropologist from an alien planet visits Earth and tries to make sense of this bipedal ape called *Homo sapiens* – is one of those perspective-shifting thought experiments that results in readers gaining hitherto unknown insights into our peculiar species, and buries once and for all the fatuous blank slate model of humanity that discounts our deep connectedness to all other animals. A compelling read – I learned something new on every page.

—*Michael Shermer, publisher of Skeptic magazine, monthly columnist for Scientific American, and author of Heavens on Earth: The Scientific Search for the Afterlife, Immortality, and Utopia*

This book is nothing short of brilliant, unpacking both the profound and the ridiculous in our emerging picture of human nature and cultural evolution. We won't really be the ape that understood the universe until we understand ourselves, and Steve Stewart-Williams has drawn us an irreplaceable roadmap.

—*Baba Brinkman, Science Rapper*

A strength of the book is its writing style. The book is written with verve. It's playful, lighthearted, crisp, fast-paced, and yet accurate and concise . . . I would recommend this book over older popular treatments of evolutionary psychology, or, say, Dawkins's 1976 classic *The Selfish Gene*.

—*Peter Gray, Human Nature*

As a writer and editor of evolutionary psychology books, I am always keen to get my hands on the competition as it appears. My response to Stewart-Williams's book was "Damn, this is good!" Frankly, whether you are an advocate or detractor you should acquaint yourself with this book – love it or loathe it you will learn a lot from reading it. And you will find that reading to be a captivating, page-turning, voyage of discovery. Stewart-Williams is not only an experienced evolutionary psychologist but also a talented and insightful writer with a memorable turn of phrase . . . In reading it myself, I regularly thought, "I know this stuff, it's my bread and butter (not to mention my obsession), and yet I can't wait to see where this narrative is going."

—*Lance Workman, The Psychologist*

Simply put, *The Ape That Understood the Universe* is a thorough, readable, and indispensable guide to the human species and how it operates.

—*Robert VerBruggen, The American Conservative*

Cambridge University Press
978-1-108-73275-8 — *The Ape that Understood the Universe*
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The Ape that Understood the Universe is a thrilling review of our best explanations of human behavior at a time when such theories are under attack ... For those who are open to having their politically correct preconceptions challenged, *The Ape that Understood the Universe* is a wonderful entry point into learning how the scientific method works – it doesn't care what you believe, nor what you wish were true.

—Logan Chipkin, Areo

Stewart-Williams offers a welcome overview of the field as it stands today for a lay audience in highly accessible prose ... an enjoyable and at times enthralling brief on the state of play from a bona fide expert.

—Sean Hermanson, Metascience

The Ape that Understood the Universe by Steve Stewart-Williams is a fantastic book ... It is packed with seriously interesting information from evolutionary psychology and memetics.

—Rob Henderson, Psychology Today

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STEVE STEWART-WILLIAMS

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CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom
One Liberty Plaza, 20th Floor, New York, NY 10006, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
314-321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre,
New Delhi – 110025, India
79 Anson Road, #06-04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781108732758

DOI: 10.1017/9781108763516

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First published 2018

Revised First Edition 2020

Printed in the United Kingdom by TJ International Ltd, Padstow, Cornwall

A catalogue record for this publication is available from the British Library.

ISBN 978-1-108-73275-8 Paperback

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Cambridge University Press
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For Jane, Darwin, and India

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Foreword

*Cognitive Creationism and a Realistic Vision
of Human Nature*
by Michael Shermer

On February 12, 2019 – Darwin Day, as it has become known, in celebration of Charles Darwin’s birthday in 1809 (the same day as Abraham Lincoln’s) – the polling agency Pew Research published the latest statistics on rates of belief (or not) in the theory of evolution:¹

- One third of Americans (33%) accept that “humans evolved due to processes like natural selection with no involvement by God or a higher power.”
- Almost half (48%) believe that evolution happened but was “guided or allowed by God or a higher power.”
- Nearly a fifth (18%) “reject evolution entirely, saying humans have always existed in their present form.”

Religious affiliation makes a difference. Acceptance of the theory of evolution due to natural processes alone was a paltry 4% among white evangelical Christians, with 38% of them believing that humans have always “existed in their present form.” Catholics have come around to the idea that humans evolved ever since Pope John Paul II embraced the theory in his 1996 encyclical, and today 56% of them accept the fact that humans evolved “guided by God or higher power” and 30% agree that we evolved entirely “due to natural processes.” The religiously unaffiliated (those who describe their religion as atheist, agnostic, or “nothing in particular”) have the highest rate at 64% accepting the theory of evolution for humans with no guidance from God.

Political commitments also matter for belief in evolution. A 2012 Gallup Poll² found that “58% of Republicans believe that God created

humans in their present form within the last 10,000 years,” and only 5% believe that humans evolved and God had no part in the process, figures that won’t surprise many people. What is astonishing, however, are the findings that 41% of Democrats and 39% of Independents believe that God created humans in their present form within the last 10,000 years. Only 19% of Democrats and Independents believe that humans evolved and God had no part in the process, and there was no significant difference between Republicans (31%) and Democrats (32%) in the belief that humans evolved via God-guided processes.

Say what? I thought Democrats were the people of the science book, not the holy book. Clearly there are more factors at work here than empirical evidence and rational inference to the best explanation – evolution happened. In my 2006 book *Why Darwin Matters*, I outlined six reasons why people do not accept the theory of evolution:³

1. A general fear that science is a threat to religion. This falls under the rubric of what I call the “conflicting worlds” model of science and religion, where one is forced to choose one over the other, which I contrast with the “same worlds” model, in which an attempt is made to use science to prove religious tenets, and the “separate worlds” model, where science and religion occupy entirely different domains (embodied in Stephen Jay Gould’s famous NOMA – Non-Overlapping Magisteria).⁴ Although the percentage of Americans who say they believe in God has declined in recent years, and the number of people with no religious affiliation – the “nones” – has significantly increased (about 23% of all Americans and 34% of Millennials⁵), about 90% of Americans still believe in a higher power of some kind (even if it isn’t the God of the Bible),⁶ and 59% of the public says that science and religion are often in conflict.⁷
2. A specific fear that evolutionary theory is a threat to religion. For specific religious tenets, such as the age of the earth or the sequence of creation in Genesis, science and religion are in conflict. Fortunately, most of the world’s religions are flexible enough to adjust to the ever-changing findings of science and read their origin myths as allegory. But American fundamentalist religious sects – most notably evangelicals and mainline Protestants – have focused their scientific skepticism on such hot-button issues as evolution (and, more recently, climate change).⁸
3. Misunderstanding of evolutionary theory. Because of the controversy generated by the evolution–creation debate, the subject is

- often not included in science curricula, or if it is, teachers opt out of teaching it to avoid tensions and conflict with administrators and parents. A 2001 Gallup poll, for example, found that 66% of Americans considered themselves to be “uninformed” about evolution.⁹
4. The fear that evolution degrades our humanity. After Copernicus toppled the pedestal of our cosmic centrality, Darwin delivered the coup de grâce by revealing us to be “mere” animals, subject to the same natural laws and historical forces as all other organisms. Nancy Pearcey, a fellow of the Discovery Institute, in a briefing on intelligent design before a House Judiciary Committee of the United States Congress, quoted from a popular song that urged “you and me, baby, ain’t nothing but mammals so let’s do it like they do on the Discovery Channel.” Pearcey went on to claim that since the US legal system is based on moral principles, the only way to generate ultimate moral grounding is for the law to have an “unjudged judge,” an “uncreated creator.”¹⁰
 5. The equation of evolution with ethical nihilism and moral degeneration. The reasoning behind this fear runs along these lines: Evolution implies that there is no God, so belief in the theory of evolution leads to atheism; without a belief in God there can be no morality or meaning; without morality and meaning there is no basis for a civil society; without a civil society we will be reduced to living like brute animals. Such illogic was voiced in 1991 by the neoconservative social commentator Irving Kristol: “If there is one indisputable fact about the human condition it is that no community can survive if it is persuaded – or even if it suspects – that its members are leading meaningless lives in a meaningless universe.”¹¹
 6. The fear that evolutionary theory implies we have a fixed or rigid human nature. This is a variant of genetic determinism and is a criticism leveled against sociobiology and evolutionary psychology because of the deterministic implication that we are resistant to political reforms and economic reapportionment policies. Interestingly, the first five reasons above tend to arise from the political Right because of its strong religious conservative bent that sees evolutionary theory as a challenge to fundamental religious doctrines; this last reason surfaces from the political Left because of its strong liberal bent that sees evolutionary theory as a challenge to their fundamental political doctrines. I call this form of creationism “cognitive creationism.”

The source of cognitive creationism is the battle over the nature of human nature, and the politico-economic implications of what that nature means for the structuring of human societies. Cognitive creationists have resisted attempts to apply evolutionary thinking to the human mind and society, concerned that if human thought, morals, social behaviors, and economic choices were also fashioned by natural selection, then social policies toward the betterment of humanity will fail. In other words, cognitive creationists believe that evolution applies only from the neck down.

In his 1987 book *A Conflict of Visions*, the economist Thomas Sowell outlined what's at stake for one's beliefs about human nature, which he described as being the *constrained vision* (conservative) or *unconstrained vision* (liberal). Conservatives and liberals, Sowell demonstrates, are consistent in their positions on a number of seemingly unrelated social issues such as taxes, welfare, social security, health care, criminal justice, and war, depending on their vision of human nature as constrained or unconstrained.¹²

If human options are not inherently constrained, then the presence of such repugnant and disastrous phenomena virtually cries out for explanation – and for solutions. But if the limitations and passions of man himself are at the heart of these painful phenomena, then what requires explanation are the ways in which they have been avoided or minimized.

In the unconstrained vision, there are no intractable reasons for social evils and therefore no reason why they cannot be solved, with sufficient moral commitment. But in the constrained vision, whatever artifices or strategies restrain or ameliorate inherent human evils will themselves have costs, some in the form of other social ills created by these civilizing institutions, so that all that is possible is a prudent trade-off.

In his 2002 book *The Blank Slate*, the psychologist Steven Pinker re-labels these two visions the *tragic vision* and the *utopian vision*, and reconfigures them slightly.¹³

The Utopian Vision seeks to articulate social goals and devise policies that target them directly: economic inequality is attacked in a war on poverty, pollution by environmental regulations, racial imbalances by preferences, carcinogens by bans on food additives. The Tragic Vision points to the self-interested motives of the people who would implement these policies – namely, the expansion of their bureaucratic fiefdoms – and to their ineptitude at anticipating the myriad consequences, especially when the social goals are pitted against millions of people pursuing their own interests.

The distinct Left–Right divide consistently cleaves the (respectively) utopian vision and tragic vision along numerous specific contests, such

as the size of the government (big vs. small), the amount of taxation (high vs. low), trade (fair vs. free), healthcare (universal vs. individual), environment (protect it vs. leave it alone), crime (caused by social injustice vs. caused by criminal minds), the constitution (judicial activism for social justice vs. strict constructionism for original intent), and many others.

I agree with Sowell and Pinker that the unconstrained vision is utopian, which in its original Greek means “no place.” An unconstrained utopian vision of human nature accepts the blank slate model and believes that custom, law, and traditional institutions are sources of inequality and injustice and should therefore be heavily regulated and constantly modified from the top down; it holds that society can be engineered through government programs to release the natural unselfishness and altruism within people; it deems physical and intellectual differences largely to be the result of unjust and unfair social systems that can be re-engineered through social planning, and therefore people can be shuffled across socioeconomic classes that were artificially created through unfair and unjust political, economic, and social systems inherited from history. I believe that this vision of human nature exists in literally *no place*.

Rather than there being two distinct and unambiguous categories of constrained and unconstrained or tragic and utopian visions of human nature, in my 2011 book *The Believing Brain*, I argued that there is just one vision of human nature – the *realistic vision* – which moves along a sliding scale, from blank slate to genetically determined.¹⁴ If you believe that human nature is partly constrained in all respects – physically, cognitively, and morally – then you hold a realistic vision of human nature. In keeping with the research from behavioral genetics and evolutionary psychology, let’s put a number on that constraint at 40% to 50% (of the variance on most human characteristics as accounted for by heredity). In the realistic vision, human nature is relatively constrained by our biology and evolutionary history, and therefore social and political systems must be structured around these realities, accentuating the positive and attenuating the negative aspects of our natures.

A realistic vision rejects the blank slate model that people are so malleable and responsive to social programs that governments can engineer their lives into a great society of its design, and instead believes that family, custom, law, and traditional institutions should be the primary sources for social harmony, with government as a backup alternative when the former fail. The realistic vision recognizes the need for strict moral education through parents, family, friends, and

community because people have a dual nature of being selfish and selfless, competitive and cooperative, greedy and generous – our “better angels” and our “inner demons” in Steven Pinker’s apt description in his 2011 book *The Better Angels of Our Nature*¹⁵ – and so we need rules and guidelines and encouragement to do the right thing. The realistic vision acknowledges that people vary widely physically, cognitively, and morally – in good part because of natural inherited differences – and therefore will rise (or fall) to their natural levels.

The unwillingness to accept a realistic vision of human nature – that is, to embrace cognitive creationism – is largely what is behind the recent revival of post-modernism in both academia and the wider culture, pushing more and more people to the Far-Left, the Regressive-Left, the Authoritarian-Left, or the Alt-Left, along with such campus craziness as we’ve witnessed at Evergreen, Berkeley, Yale, and Middlebury related to so-called hate speech, microaggressions, trigger warnings, safe spaces, and the de-platforming of speakers who do not embrace an unconstrained or utopian vision of human nature.

Over the past decade conservative creationism has largely faded from political and cultural influence, as “creation science,” “scientific creationism,” and “intelligent design theory” have all been roundly defeated in court cases in which they tried to get their doctrines taught in public school science classes (most notably in Arkansas, Louisiana, and Pennsylvania). But cognitive creationism has more than replaced this old-time creationism in influence inasmuch as its reach and scope is far wider in the academy and the media as more and more liberals lurch ever leftward and adopt its blank slate doctrines.

This is why Steve Stewart-Williams’ book *The Ape that Understood the Universe* is so critically important to our national conversation. He not only lays out the evidence for evolution and describes how natural selection operates on organisms’ bodies (including human bodies), he presents what I think is the best refutation of cognitive creationism ever penned, and along with it a thorough debunking of the unconstrained and utopian visions of human nature. His two appendices on “How to Win an Argument with a Blank Slater” and “How to Win an Argument with an Anti-Memeticist” alone should be required reading for all students of evolutionary biology, psychology, anthropology, and sociology. And Stewart-Williams doesn’t straw-man the arguments from cognitive creationists and their blank slate views; he steel-mans their claims by making the best argument in their favor, and then refutes them systematically with evidence and logic. His perspective-shifting thought

experiment of viewing humanity through the lens of an anthropologist from an alien planet gives readers deep insights into how our mind and culture evolved. The entire book is a masterpiece of scientific reasoning, so powerfully argued and elegantly written that any honest reader upon reaching the end will have to reject all forms of creationism and adopt a realistic vision of human nature.

In our time of divisive politics in which the Left and the Right have never been so far apart on so many issues, adopting a realistic vision of human nature could help restore the balance the Founding Fathers of the United States had in mind in the system of government they set up, grounded as it was on their own theory of human nature, so well articulated by James Madison in the *Federalist Paper Number 51*:

But what is government itself, but the greatest of all reflections on human nature. If men were angels, no government would be necessary. If angels were to govern men, neither external nor internal controls on government would be necessary. In forming a government which is to be administered by men over men, the great difficulty lies in this: you must first enable government to control the governed; and in the next place oblige it to control itself.¹⁶

Abraham Lincoln also had something like the realistic vision in mind when he wrote in his first inaugural address in March of 1861, on the eve of the bloodiest conflict in our nation's history that he knew would unleash the demons within:

Though passion may have strained, it must not break our bonds of affection. The mystic chords of memory, stretching from every battlefield and patriot grave to every living heart and hearthstone all over this broad land, will yet swell the chorus of the Union, when again touched, as surely they will be, by the better angels of our nature.¹⁷

Acknowledgments

Thanks go, above all, to my wife, Jane Stewart-Williams. I can say without a shadow of a doubt that, without Jane, this book would not exist. Thanks also to our kids, Darwin and India, who've changed a lot since I first put pen to paper, but who've always been supportive and fun. Thanks to my former colleagues at Swansea University, Mark Blagrove and Michelle Lee, for allowing me to take a sabbatical to begin working on the book, and thanks to my current colleagues at the University of Nottingham Malaysia Campus, in particular David Keeble, for giving me the freedom to continue working on the book and for supporting my work in general. Thanks to Martin Daly and the late Margo Wilson, who've had a huge impact on my thinking about evolutionary psychology. Thanks to everyone who's read drafts of individual chapters, or of the entire manuscript, including Mike Alb, Amy Alkon, John Archer, Susan Blackmore, Baba Brinkman, Neil Carter, Helen Fisher, Rob Lowe, Robert King, Geoffrey Miller, Will Reader, Matt Ridley, Todd Shackelford, Michael Shermer, Beatrice Stewart, Jolyon Stewart, Andrew Thomas, Ben Winter, Lance Workman, and three anonymous reviewers for Cambridge University Press. Thanks to my editor at Cambridge University Press, Janka Romero, who's been a pleasure to work with from day one and who's made numerous suggestions that have greatly improved the book. And thanks to everyone else who's helped out in one way or another, either with the book itself or with my thinking on these topics, including Toni Airaksinen, Caitlin Allen, Pat Barclay, Kevin Berger, Katherine Bovey, Chloe Bradley, Michael Britt, David Buss, Ahimsa Campos-Arceiz, Logan Chipkin, Andrew Clark, Jerry Coyne, Oliver Curry, Marco Del Giudice, Greg Dingle, Céline

Acknowledgments

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Durassier, Mike Elgan, Rebecca Foster, Brian Gallagher, Peter Gray, Nereida Bueno Guerra, Martie Haselton, Rob Henderson, Sean Hermanson, Adam Hooper, Stephanie Huitson, Juliet Jacobs, Xavier Katana, Scott Barry Kaufman, Razib Khan, Toko Kiyonari, Danny Krupp, Tom Lawrence, Jean-Baptiste Leca, Claire Lehmann, Ricardo Lopes, Andrew Loughnan, Scot McKay, James McKellar, Stewart McWilliam, Randy Nesse, Nikki Owen, Adam Perrott, Steven Pinker, John Podd, Diana Rissetto, Sheila Sadler, Markus Schär, David Schmitt, Yael Schonbrun, Delia Shanly, Rob Sica, Christina Hoff Sommers, Emily Souders, Vivek Thuppil, Phil Tucker, Robert VerBruggen, Alison Walker, Abigail Walkington, Andrew Ward, Tom Whipple, Lee White, Barbara Williams, Brian Williams, and David Wineberg. Last but not least, thanks to John Anderson for the plant genitals joke (see the Alien's Report).

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