

# UNLEASH YOUR PRIMAL BRAIN

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DEMYSTIFYING HOW WE THINK AND WHY  
WE ACT

TIM ASH





## PRAISE FOR UNLEASH YOUR PRIMAL BRAIN

"In highly readable style, Tim Ash moves readers from the basics of brain functioning to the evolution of its regularities, quirks, and affordances. In the process, we gain **invaluable insights into human decision-making and behavior.**"

Robert Cialdini — Author of *Influence* and *Pre-Suasion*

**"A fascinating and thrilling look into our minds and what matters."**

Jay Baer — Founder of Convince & Convert, co-author of *Talk Triggers*

"Tim has studied the research on behavioral science and evolutionary psychology and written an excellent book that explains much of human behavior. **If you want to know why we do what we do, then read this book.**"

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“This book would be very helpful for anyone who wants to understand what truly drives attention, emotions and cognitive arousal, from the perspective of psychology! **Very addictive read by an author with great experience and academic knowledge.** I highly recommend this book!”

Dr. Hedda Martina Šola — Dir. of the Institute for  
Neuromarketing, Oxford Business College

"A no-nonsense look at what drives us - **exposes the evolutionary "why" behind our actions!**"

Phil Barden — Managing Director of DECODE, bestselling author  
of *Decoded: The science behind why we buy*

"Managing your brain is the job of your life. This book is **a good way to understand the operating system we've inherited.**"

Loretta Breuning, PhD — Author of *Habits of a Happy Brain*

“Before you try to change someone’s mind or convince somebody to buy from you, it would be wise to understand how that spongy thing in our skull works. From chemistry and biology to psychology and evolution, Tim Ash cracks open the skull (almost literally) to uncover and explain the magic of it all. *Unleash Your Primal Brain* is a journey and a directive. **When you can better understand how we think, you will be primed to know how to make others take action.** As much as things have changed, Tim brings it all back to basics... this is one primal read...”

Mitch Joel — Author, *Six Pixels of Separation* and *CTRL ALT Delete*

"They say the mind has a mind of its own. In this **fantastic book**, Tim introduces us to a strange, wild, but somehow exceedingly familiar friend - our own brain."

Robert Rose — Keynote speaker, content strategist, bestselling author of *Killing Marketing*

**"What a wild ride!** Tim's ambitious book takes us from early life on earth, to the bizarre qualities that make us uniquely human. Sleep, memory, herd instinct, motivation, language, culture, cooperation - it's all in there. **A must-read book that will literally blow your mind!"**

Joel Comm — *New York Times* bestselling author, keynote speaker, futurist

“A provocative primer on our primal selves! **A must-read to understand why our behavior can create both failures and massive wins.**”

AmyK Hutchens — Award-winning speaker & bestselling author of *GET IT: Five Steps to the Sex, Salary and Success You Want*

"Tim has a deep passion for making the complexities of human behavior fun, fast and easy to understand. **If you want to understand human behavior, this should be on your nightstand.** Don't overthink this decision - go with your primal brain and be blown away!"

Will Leach — Author of *Marketing to Mindstates*

“Learn what it means to be truly human – our evolution comes alive in Tim’s vivid book about the most fascinating art and science of our primal selves. **A treasure-trove of unexpected insights!**“

Bryan Kramer — Keynote, CEO of H2H Companies, bestselling author of *Human to Human* and *Shareology*

“Buckle up: Tim Ash lets you ride shotgun through the nooks, crannies, and hidden valleys of your own mind. **An epic, fun joyride!**”

Ann Handley — Keynote speaker, *Wall Street Journal* bestselling author of *Everybody Writes* and *Content Rules*

“Tim Ash explains how to **reliably persuade others from the inside out** in his exciting new book.”

Nir Eyal — *New York Times* bestselling author of *Hooked* and *Indistractable*

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DEMYSTIFYING HOW WE THINK AND WHY WE ACT



**Tim Ash**



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*To my parents Tanya and Alexander  
who sacrificed so very much to create a wondrous and  
unexpected life for me.*

*To my brother Artem,  
who lives with an open heart and unfolding wisdom.*

*To my wife Britt,  
without whose love and support I could not carry on the  
sacred work of family.*

*To my children Alexander and Anya,  
who teach me to be better every day and for whom I strive  
to build a better world.*

*I love you all!*



## ACKNOWLEDGMENTS

This is my third book, and I have come to realize that writing one is not a discrete process. It does not begin with the first words in a notebook, nor end on a printed page. The ideas have been circulating inside of me, and have been shared and refined with others for many years. Echoes of the published book will continue to intertwine with my life far in the future.

Endless love and gratitude to my wife Britt, and children Alex and Anya. The countless hours that I spent writing this book were hours that I could not spend with you. That is my great loss.

Much love and respect to Marty Greif, Robyn Benensohn, Dale Shimato, Erik Itzkowitz, Snejana Norris, Alexander Svensson, and the rest of the SiteTuners team – you helped to validate and apply much of the powerful neuromarketing principles that I cover in this book in order to create massive value for our online marketing clients.

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If I have inadvertently forgotten anyone, please forgive me and blame the publishing deadline.

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## INTRODUCTION

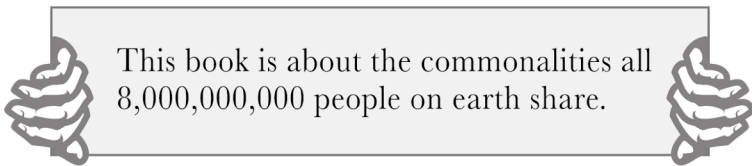
It's dessert time!

There is a juicy apple in front of you, and a slice of chocolate cake.

You are free to choose.

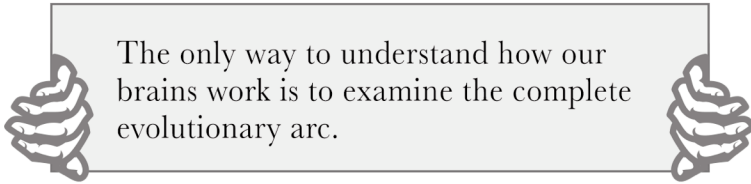
Or are you?

The choice was made for you — hundreds of millions of years ago!



Our ancestors were molded by ruthless survival pressures from the earliest days of life on the planet. Adaptations which worked long ago are still inside of us — also shared with insects and reptiles. Later additions are common to all mammals from the tiniest shrews to the most massive whales. Some capabilities were bolted on relatively recently, and are only shared with our primate cousins. And

the runaway explosion of humans on the planet can only be explained by our bizarre species-level evolution.



I don't care if you are young or old, rich or poor, introverted or extroverted. It is not about our individual differences. This book describes the basic operating system of how we all deal with life.

Drop a rock. It falls and hits the ground.

Once you understand brain evolution, many of our behaviors will become more predictable. To a scary degree, we are reactive animals ruled by passions, and not the rational geniuses with free will that we like to imagine.

First the bad news: The notion that people make decisions and choices to maximize objective self-interest has been demolished. People are not rational — far from it.

Now the good news: We are finding out exactly how and why we act in these seemingly irrational ways. In other words, there is a method to our seeming madness.

My view of the brain is heavily influenced by evolutionary biology and psychology. I don't believe we have arrived at a perfect brain design, or that humankind deserves an exalted and special place in the universe. Rather, we are a band of super-cooperative apes who have come to dominate the planet. In the process we have wiped out whole ecosystems in our voracious destructiveness. At this moment we are by far the most dominant force shaping the very destiny of life on earth.

We evolved for a particular environment, but our rapid social advances and mushrooming populations have created a bewildering



new world. On the timescale of this dizzying change, evolution has effectively stopped, and we must rely on what has gotten us this far. By retracing the path that our distant ancestors took to get here, we can understand the stunning abilities and glaring weaknesses which we have inherited.

Sometimes our reactions and responses are appropriate and uncannily helpful. In the blink of an eye we can assess complex situations and reach critical life-or-death decisions. At other times, we are seemingly our own worst enemies — repeating the same mistakes, even when we know the results will be counterproductive, or even deadly.

Unlocking the true nature of the human brain is the last frontier. Recent work in fields such as biology, neuroscience, evolutionary psychology, medical imaging, social science, and behavioral economics is combining to show us the inner workings of this evolutionary marvel.

This book is designed for you — the curious and intelligent searcher for truth.

I want to give you the essentials, and draw you a map of the wondrous terrain inside of the human mind.

You will forever be altered by the journey we are about to undertake together. It may seem like an alien landscape at first. But you will gain valuable perspectives which will allow you to live your life with a new appreciation of what makes us tick.

Forget the advanced technology all around you — let's explore inside of the bony skull which guards the treasures within...

Get ready, it's going to be a wild ride!



# FOUNDATIONS

PART I







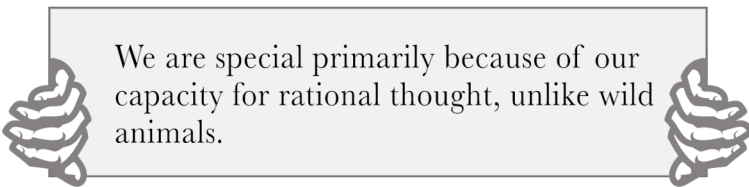
# THE LIE OF RATIONALITY

## CHAPTER 1

### **The Big Lie**

We have been sold a lie. And it's a big one.

It has been circulating in various forms for thousands of years. It warps our view of ourselves, other people, and our very relationship to the world around us. The lie has far-reaching implications, and is insidious because we desperately want to believe it.



We are special primarily because of our capacity for rational thought, unlike wild animals.

Reasoning, discourse, objectivity, truth, rationality, delayed gratification, and planning — all bound up into one giant belief about our basic nature. “I think, therefore I exist,” declared Descartes three and a half centuries ago. We are all his philosophical grandchildren.

Consider the alternative — no one wants to be irrational, hotheaded, random, or unpredictable. A society based on such

people could not function and civilization would devolve into chaos and violence.

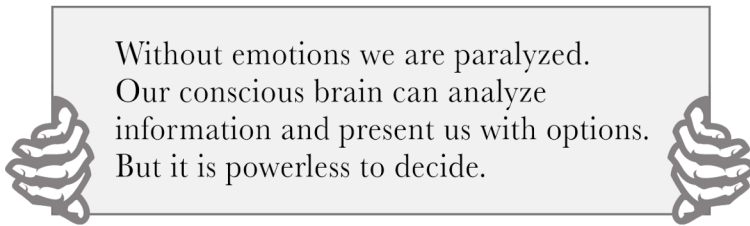
Worse yet, we are certainly not lumbering beasts lashing out from reflex, or ruled by strong emotions and passions. None of us want to believe we are fickle, weak, or easy to manipulate.

Even if our emotions sometimes overpower us, we believe the rational part of our brain is at least in control most of the time. It is the benevolent and calm overlord and master.

The big lie is very flattering and feels good — we are different not in *degree*, but rather in *kind* from other animals. We are special!

### **Emotions and decisions**

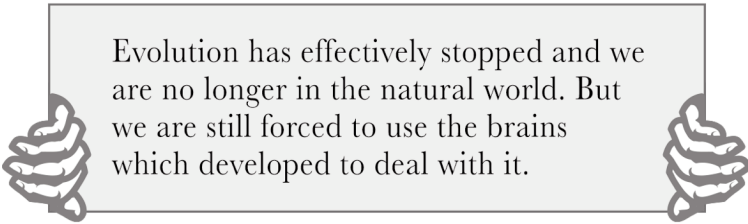
Emotions are considered an annoying artifact of our primitive selves. We feel we would make much better choices were it not for the distorting effects of strong passions. In fact, we have it backward.



Emotions are the guideposts for survival. The stronger the feeling, the more immediately we must react to it. We move towards the experience of positive emotions, expecting something good to happen. We move away from the experience of negative ones, hoping to avoid pain.

Our emotions are a snapshot of all information available to the primal brain. Our “gut” feeling is generally reliable, and helps us to choose among available options. Emotions are based on chemical helpers which evolved to deal with survival challenges in the distant past across a wide array of species.

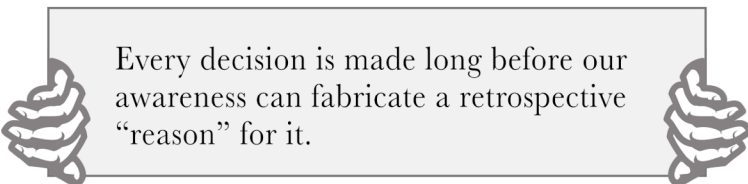
But emotions are not foolproof. Shortcuts and automatic instincts helped our ancestors to survive. But our distant past is unlike the “civilized” world in which we find ourselves. Many of the responses that got our ancestors here are often suboptimal and counterproductive in modern societies. Unfortunately, there is not much we can do about it.



Why do we fight so hard against this emotion-driven view of our brains?

There is another untold part of the story — our conscious mind wants to make meaning out of the world around it. In a chaotic environment, it looks for hints and patterns to help it predict the future. We tell ourselves stories involving cause and effect. These stories are nothing more than an alibi and a cover-up.

With modern brain imaging techniques, we can see decisions made in the primal brain. Only after a significant delay do portions of the conscious mind wake up, to justify or verbally describe them.



Science fiction great Robert Heinlein was speaking about all humankind when he declared, “Man is not a rational animal; he is a rationalizing animal.”

We can try to understand ourselves consciously, through dialogue, therapy, or mindfulness practices. But we will never have direct access to the older parts of the brain. Through brutal competition and evolutionary pressures, they have gotten our ancestors through the first billion years of life on this planet. Those primordial and wordless depths are the origin of most of our actions and decisions.

It would be too cumbersome and slow if we were to deliberately use the modern parts of the brain for everything. In the animal world there are the quick and the dead, and rest assured that your ancestors were all quick, or you would not be here.

The primal parts of the brain are still there — working tirelessly, with massive capacity and lightning speed. They are well suited to make most decisions and initiate appropriate actions. The modern, energy-intensive parts of the brain are kept largely deactivated. They are only woken when their special abilities would be complementary and useful to the primal brain for the task at hand.

### **We are the products of evolution**

The notion of humankind's special place in the universe keeps getting pushed further into a corner by the advances of science.

We no longer live under the notion that the whole universe revolves around the earth in a mechanical celestial dance. We know that we are on a planet that orbits an insignificant star. The star is on the outer edge of an unremarkable galaxy, which itself is one of at least two hundred billion others. Our sun has 700,000,000,000,000,000,000,000,000,000,000,000 (700 trillion septillion) sisters. Planets, including ones that can sustain life, orbit many of those.

Evolution has produced countless species throughout billions of years on earth. To think people are somehow apart from this process is the height of arrogance, or intentional willful ignorance. We are all connected to the very first self-replicating virus — the mother of us all.

### **Chance and circumstance**



We are dandelion seeds blowing in the wind.

Even the subtlest of initial nudges can set us on radically divergent paths which we cannot foresee. Sensory inputs bombard us completely unnoticed, while shaping us profoundly.

Our current state — the sum total of what has brought us to this moment, and the memories encoded in it — also influences us. For example, a person scarred by war or personal trauma in early life is forever wired differently. Even subtle forces will guarantee that we respond to the same events unlike others. Some of these influences can be recent — mere hours, minutes, or seconds before. Most people would, for example, agree that they react more impulsively when they are sleep-deprived or hungry.

The machinery of our primal brain automatically examines, prioritizes, and ignores the vast majority of the information it receives. If necessary, it occasionally acts as well — enhancing our survival prospects from moment to moment.

We are at the mercy of powerful forces that we cannot comprehend, or even see. Both inside and outside of our bodies, we are not really in control. The notion that we are the masters of our life destiny, or the active “choosers” of our decisions, is nothing more than a comforting illusion.



## ABOUT THE AUTHOR



**Tim Ash** is an acknowledged authority on evolutionary psychology and digital marketing. He is a sought-after international keynote speaker, and the bestselling author of *Unleash Your Primal Brain* and *Landing Page Optimization* (with over 50,000 copies sold worldwide, and translated into six languages).

Tim has been mentioned by *Forbes* as a *Top-10 Online Marketing Expert*, and by *Entrepreneur Magazine* as an *Online Marketing Influencer to Watch*.

Tim is a highly-rated keynote speaker and presenter at over 200 events across four continents. He has been asked to return as a

keynote at dozens of events because of the fantastic audience response. Tim shines on massive stages with over 12,000 attendees, as well as in intimate executive gatherings. He offers dynamic conference keynotes, workshops, and corporate training services (both in-person and virtually). Tim also selectively works as an online marketing advisor with senior executives.

For nineteen years he was the co-founder and CEO of SiteTuners – a strategic digital optimization agency. Tim has developed deep expertise in user-centered design, persuasion, understanding consumer behavior, neuromarketing, and landing page testing. In the mid-1990s he became one of the early pioneers in the discipline of website conversion rate optimization (CRO).

Tim has helped a number of major brands develop successful web marketing initiatives and created over \$1,200,000,000 in value. Companies like Google, Expedia, eHarmony, Facebook, American Express, Canon, Nestle, Symantec, Intuit, Humana, Siemens, and Cisco have benefited from his deep understanding and innovative perspective.

He was the founding chair of the international Digital Growth Unleashed event series (with over 30 conferences in the US and Europe since 2010). Since 1995, he has authored more than 100 published articles. Tim was also the online voice of website improvement as the host of the Landing Page Optimization Podcast on WebmasterRadio.fm (over 130 recorded interview episodes with top online marketing experts).

Tim earned a dual-major Bachelor of Science degree “with highest distinction” in Computer Engineering and Cognitive Science from U.C. San Diego while studying on a U.C. Regents Scholarship (the highest academic award of the U.C. system). He stayed on at U.C. San Diego for Ph.D. studies focused on machine learning and artificial intelligence. Although Tim never defended his dissertation, he advanced to candidacy and also earned his Master’s degree in Computer Science along the way.

Originally born in Russia, Tim has been a long-time resident of San Diego, where he lives with his wife and two children within walking distance of the Pacific Ocean. Tim was a conference-winning collegiate sabre fencer and Athlete of the Month at U.C. San Diego, and is a certified Tai Chi Chuan martial arts instructor. He is a poet, painter, and an avid photographer specializing in travel and fine-art figurative work.

