the upright thinkers the human journey from living in trees to understanding the cosmos

#human evolution #cosmic understanding #origin of humanity #scientific progress #anthropological journey

Explore the profound human journey from our ancient origins, living in trees, through countless millennia of human evolution and scientific progress. This captivating narrative delves into how upright thinkers propelled humanity's anthropological journey from basic survival to an astonishing cosmic understanding, continuously seeking to unravel the universe's deepest mysteries.

The Upright Thinkers

In this fascinating and illuminating work, Leonard Mlodinow guides us through the critical eras and events in the development of science, all of which, he demonstrates, were propelled forward by humankind's collective struggle to know. From the birth of reasoning and culture to the formation of the studies of physics, chemistry, biology, and modern-day quantum physics, we come to see that much of our progress can be attributed to simple questions-why? how?-bravely asked. Mlodinow profiles some of the great philosophers, scientists, and thinkers who explored these questions-Aristotle, Galileo, Newton, Darwin, Einstein and Lavoisier among them-and makes clear that just as science has played a key role in shaping the patterns of human thought, human subjectivity has played a key role in the evolution of science. At once authoritative and accessible, and infused with the author's trademark wit, this deeply insightful book is a stunning tribute to humanity's intellectual curiosity.

Food for Thought

Food Science and Engineering will play a critical role in enabling the future of humanity. Why and how? Whether you are a young mind with aspirations for a greater cause and a career or an experienced professional in the food industry wanting to make a positive impact, Food for Thought is calling for you! Food for thought, not for afterthought. Not anymore… Our global food system is not sustainable and efficient. It has many complex problems. These problems will require strong collaborative efforts across multiple stakeholders, including various science and engineering fields. Food Science and Engineering will be at the front and center of these efforts. This is not about a bleak, pessimistic picture of the future but about an excellent opportunity both to contribute to a greater cause and achieve a happy and successful individual career through the use of science and technology. Leveraging his more than 20 years of experience in the Research and Development function in one of the leading global food and beverage companies, Kaan Demiryurek initiates a compelling mission for both young and

experienced food scientists and engineers to take a leading role with his optimism about food science and engineering for the future of humanity.

The Science of Learning

This book systematically summarizes the author's more than 30 years of experience in teaching reform and educational research. The book is divided into three parts. Part I focuses on the comprehensiveness of thinking and the relationship between the coordinated development of thinking and the overall development of human beings. Part II and Part III mainly discuss the six basic principles of learning and thinking: the principle of the working memory of thinking, the principle of learning transfer, the principle of the basic process of learning, the principle of multi-level development of ability, the principle of sustainable development of learning, and the principle of subjectivity of learning. This book features the rules and characteristics of student learning with a student-centered approach, which can help teachers and educational researchers to better understand students and provide theoretical guidance for students' all-round development.

A Mennonite Boy's Odyssey

A Mennonite Boy's Odyssey is a story of courage and discovery. Some individuals are fully content to embrace answers provided by their own elders to life's great questions. For others, their elders' way proves untenable. They must forge their own path, awakening through assimilation from alternate sources. A Mennonite Boy's Odyssey traces one such awakening, a life journey of spiritual development from growing up Mennonite in the Shenandoah Valley of Virginia in the 1950s and 1960s, through decades of reading, thought, and enquiry. The book balances life experience with intellectual and spiritual transformation. This book is an accounting of a Hero's Journey, in the parlance of Joseph Campbell.

Rebooting Clausewitz

Rebooting Clausewitz offers an entirely new take on the work of history's greatest theorist of war. Written for an undergraduate readership that often struggles with Clausewitz's master work On War--a book that is often considered too philosophical and impenetrably dense--it seeks to unpack some of Clausewitz's key insights on theory and strategy. In three fictional interludes Clausewitz attends a seminar at West Point; debates the War on Terror at a Washington think tank; and visits a Robotics Institute in Santa Fe where he discusses how scientists are reshaping the future of war. Three separate essays situate Clausewitz in the context of his times, discuss his understanding of the culture of war, and the extent to which two other giants--Thucydides and Sun Tzu--complement his work. Some years ago the philosopher W.B. Gallie argued that Clausewitz needed to be 'saved from the Clausewitzians'. Clausewitz doesn't need saving and his commentators have contributed a great deal to our understanding of On War's seminal status as a text. But too often they tend to conduct a conversation between themselves. This book is an attempt to let a wider audience into the conversation.

The 100 Most Influential Technology Leaders of All Time

This book presents biographies of 100 innovators of technology who have affected nearly every facet of life, from transportation and communication to science and entertainment. Their names range from the familiar, such as Thomas Edison, to the more obscure, such as Henrietta Swan Leavitt, but their contributions to today's world are all vital.

The Personality of Math

This book shows that engaging with the personality of math is an essential key to learning and teaching math.

Openness to Creative Destruction

Life improves under the economic system often called "entrepreneurial capitalism" or "creative destruction," but more accurately called "innovative dynamism." Openness to Creative Destruction: Sustaining Innovative Dynamism shows how innovation occurs through the efforts of inventors and innovative entrepreneurs, how workers on balance benefit, and how good policies can encourage innovation. The inventors and innovative entrepreneurs are often cognitively diverse outsiders with the courage and perseverance to see and pursue serendipitous discoveries or slow hunches. Arthur M. Diamond, Jr.

shows how economies grow where innovative dynamism through leapfrog competition flourishes, as in the United States from roughly 1830-1930. Consumers vote with their feet for innovative new goods and for process innovations that reduce prices, benefiting ordinary citizens more than the privileged elites. Diamond highlights that because breakthrough inventions are costly and difficult, patents can be fair rewards for invention and can provide funding to enable future inventions. He argues that some fears about adverse effects on labor market are unjustified, since more and better new jobs are created than are destroyed, and that other fears can be mitigated by better policies. The steady growth in regulations, often defended on the basis of the precautionary principle, increases the costs to potential entrepreneurs and thus reduces innovation. The "Great Fact" of economic history is that after at least 40,000 years of mostly "poor, nasty, brutish, and short" humans in the last 250 years have started to live substantially longer and better lives. Diamond increases understanding of why.

Science and Religion

Science and religion are two different worldviews that involve different methods of attaining truth, one based on evidence using a scientific method to examine the natural world and the other based on belief in certain religious precepts often involving a supernatural dimension based on a holy book in some cases, and on the authority of religious leaders. This book examines the nature of religion and the role it plays in society along with unresolved problems that have existed for some time. The nature of science is then discussed along with the scientific method and problems with science that have not been resolved. The origins of science and religion are then examined and the relationship of these two worldviews and the relationship of science to the supernatural. Finally, the future of religion is examined along with its ongoing relationship to science. The real battle between science and religion involves the question of who gets to decide the truth about the world we live in and our status as human beings in this world. The answer to that question is not obvious but has enormous implications for human life on a planet that is under stress and may not be able to support human life for much longer as our actions have consequences that are now becoming all too apparent.

Dichotomies: Lessons from a College Life on Tour

The touring band life of a full-time student is full of dichotomies. From 2011-2017, Alex Dontre performed 505 concerts with his band Psychostick while simultaneously pursuing a college education. It culminated with a master's degree in Business Psychology from Franklin University, at which time he gave the commencement speech at his graduation as valedictorian.

Laws of Nature

This Book provides new foundations for modern physics and natural philosophy. In the past 100+ years, modern physics has been based on Quantum Concept, Einstein’s Relativity Theory, and three equations (Schroedinger Equation, Klein-Gordon Equation, and Dirac Equation). Relativity Theory not only is melted into the bones of modern sciences, it has also deeply infiltrated liberal arts and philosophical thoughts of several generations. As such, Einstein was regarded world’s greatest scientist in human history. While modern physics has splendid achievements in the past 100 years, it is now at a dead pass, unable to solve many fundamental problems like graviton, strong force, double slit experiments, quantum entanglement, etc.. Worse, the latest astronomical discoveries by the Webb Telescope has brought strong evidences against the Big Bang Theory that is based on General Relativity. As such, the whole modern physics is at jeopardy. Through lifetime pondering and research, the author has found that modern physics is on many shaky grounds and finally rebuilt physics without them. This book is the culmination of his lifetime work, most of its contents are published for the firs time. Chapter 1 provides a brief history of human cognition, and discusses the criteria for discerning truth and fallacy. Chapter 2 rigorously invalidates both Special Relativity and General Relativity from four different grounds, pulling down all existing “evidences” that were claimed to support Relativity Theory. Chapter 3 reviews the fundamental concepts in physics and natural philosophy and makes necessary corrections. Chapter 4 gives a new theory on gravity and gravitons. Chapter 5 re-studies electromagnetics, provides a complex set of Maxwell Equations and a new theory on electromagnetic wave. Chapter 6 provides a new photon theory, which not only satisfies all existing knowledge about photon, but solves the problems of double slit experiment and quantum entanglement successfully. Chapter 7 derives Schroedinger Equation from two basic physics principles and prove that the Schroedinger Wave Function does not represent particle state probability, but its complex electric and magnetic field energies. Error-prong modern physics methods are also criticized. Chapter 8 provides a new particle theory, which not only solves the mystery

of proton and neutron, but can successfully construct atoms of large atomic numbers. The new theory also reveals the secrets of strong force and weak force, as well as chemical bonds. Chapter 9 also rebuilds the foundation of thermodynamics by redefining entropy explicitly, so to greatly simplifies the basic thermodynamics equations. Many well-known results in thermodynamic and statistical physics are invalidated. Chapter 10 also rebuilds the foundation of astrophysics. First, the main cause of star's light spectrum redshift is finally discovered. Second, the basic pressure and temperature equations inside stars are corrected. Third, new theories about stars, galaxies, and universe are provided which are consistent with observations and new physics theories in this book. Fourth, the true energy source in nuclear fission and fusion is discovered. Chapter 11 discusses a few important things about life. Chapter 12 discusses a few things that face human in the near future. Appendix provides a comprehensive discussion on redshifts of star light spectrum, and finally prove that quantum loss redshift is the main cause of star light spectrum redshift. Appendix B proves that if Special Relativity is correct, then General Relativity is not. It also provides a simple, closed form solution for photon's motion in gravity field. While the author cannot guarantee correctness of everything in the book, the new theories overcome the contradictions of existing ones and explain many more things that existing ones could not. The most important thing is all the theories in the book are mutually consistent and therefore re-enforce each other. As such, the author thinks that the GUT and TOE problems that physicists have dreamed along are now closed.

Why?

Livio investigates curiosity through the lives of paragons of inquisitiveness as Leonardo da Vinci and Richard Feynman. He interviewed a range of exceptionally curious people from an astronaut with degrees in statistics, medicine, and literature to a rock guitarist with a PhD in astrophysics

Focus on Thinking

In the wake of initiatives such as No Child Left Behind and the use of high-stakes testing, the emphasis in schools has been on drill and practice for the test. Genuine understanding and critical thinking have been increasingly shortchanged. As a result, students have fewer opportunities to advance their insight into cognitive and emotional challenges, even though both teachers and parents recognize the importance of developing deliberative and reflective thinking skills. This book uniquely combines two things. First, it provides resources for classroom teachers in middle and secondary school that make it possible to, at a moment's notice, take advantage of a teachable moment by drawing students into productive intellectual discussions. Second, it gives the reader an overview of the rationale and the research base for engaging students in educational activities that are truly intellectual and that are not limited to training for testing success.

How Humankind Created Science

The development of science has been an ideological struggle that lasted over three millennia. At and after the times of the Babylonian Empire, however, the pace of scientific evolution was painfully slow. This situation changed after Copernicus kick-started the Scientific Revolution with his heliocentric theory. Newton's law of universal gravitation transformed natural philosophy, previously focused on mythology and abstract philosophical thinking, into an orderly and rational physical science. Einstein's redefinition of space and time revealed a new and central principle of the Universe, paving the way for the huge amounts of energy held deep inside physical matter to be released. To this day, many of the our known physical theories represent an accumulation of changing knowledge over the long course of scientific history. But what kind of changes did the scientists see? What questions did they address? What methods did they use? What difficulties did they encounter? And what kind of persecution might they have faced on the road to discovering these beautiful, sometimes almost mystical, ideas? This book's purpose is to investigate these questions. It leads the reader through the stories behind major scientific advancements and their theories, as well as explaining associated examples and hypotheses. Over the course of the journey, readers will come to understand the way scientists explore nature and how scientific theories are applied to natural phenomena and every-day technology.

Elastic

The bestselling author of The Drunkard's Walk and Subliminal unlocks the secrets of flexible thinking. What do Pokémon Go and Mary Shelley's Frankenstein have in common? Why do some businesses survive, and others fail at the first sign of change? What gives the human brain the edge over

computers? The answer: Elastic Thinking. It's an ability we all possess, and one that we can all learn to hone in order to succeed, at work and in our everyday lives. Here Leonard Mlodinow, whose own flexible thinking has taken him from physics professor to TV scriptwriter and bestselling author, takes us on a revelatory exploration of how elasticity works. He draws on cutting-edge neuroscience to show how, millennia ago, our brains developed an affinity for novelty, idea generation and exploration. He discovers how flexible thinking enabled some of the greatest artists, writers, musicians and innovators to create paradigm shifts. He investigates the organisations that have demonstrated an elastic ability to adapt to new technologies. And he reveals how you can test your own brain power and increase your capacity for elastic thinking. By uncovering the secrets of our flexible minds, Elastic explains how to thrive in an endlessly dynamic world, at a time when an ability to adapt is more important than ever before.

Deconstructing Management Maxims, Volume I

A contrarian challenge to the status quo, this book vigorously champi-ons healthy skepticism in management theory and practice. Several com-mon management maxims — often taken for granted a s truisms — are examined and debunked with evidence-based arguments. The constant repetition of thes e flawed tropes perpetuates their mythological status and limits personal and organizational performance . Far from a business as usual business book, Deconstructing Manage-ment Maxims has been research ed with academic rigor yet written in an approachable style. Unafraid of taking on conventional busine ss wisdom, it contains some controversial yet substantiated positions that will pro-voke critical thinking and debate. After all, sacred cows and long-believed tenets of management lore do not go away quietly . A clear message from this book is that you don’t have to believe everything you read or hear—be it in the classroom or at work! It offers a refreshing break from the constant drumbeat of dronish corporate and academic clichés. This book is best appreciated by readers wanting to think critically about import ant management phenom

Thinking Ahead

This book brings dialogic and critical thinking into practice.

Stephen Hawking

CHOSEN AS A BOOK OF THE YEAR BY THE GUARDIAN, DAILY TELEGRAPH, NEW STATESMAN AND BBC SCIENCE FOCUS 'An intimate, unique, and inspiring perspective on the life and work of one of the greatest minds of our time. Filled with insight, humour, and never-before-told stories, it's a view of Stephen Hawking that few have seen and all will appreciate' James Clear, author of Atomic Habits An icon of the last fifty years, Stephen Hawking seems to encapsulate genius: not since Albert Einstein has a scientific figure held such a position in popular consciousness. In this enthralling memoir, writer and physicist Leonard Mlodinow tells the story of his friend and their collaboration, offering an intimate account of this giant of science. The two met in 2003, when Stephen asked Leonard if he would consider writing a book with him, the follow up to the bestselling A Brief History of Time. As they spent years working on a second book, The Grand Design, they forged a deep connection and Leonard gained a much better understanding of Stephen's daily life and struggles -- as well as his compassion and good humour. Together they obsessed over the perfect sentence, debated the physics, and occasionally punted on Cambridge's waterways with champagne and strawberries. In time, Leonard was able to finish Stephen's jokes, chide his sporadic mischief, and learn how the hardships of his illness helped forge that unique perspective on the universe. By weaving together their shared story with a clear-sighted portrayal of Hawking's scientific achievements, Mlodinow creates a beautiful portrait of Stephen Hawking as a brilliant, impish and generous man whose life was not only exceptional but also genuinely inspiring.

Euclid's Window

Through Euclid's Window Leonard Mlodinow brilliantly and delightfully leads us on a journey through five revolutions in geometry, from the Greek concept of parallel lines to the latest notions of hyperspace. Here is an altogether new, refreshing, alternative history of math revealing how simple questions anyone might ask about space -- in the living room or in some other galaxy -- have been the hidden engine of the highest achievements in science and technology. Based on Mlodinow's extensive historical research; his studies alongside colleagues such as Richard Feynman and Kip Thorne; and interviews with leading physicists and mathematicians such as Murray Gell-Mann, Edward Witten, and

Brian Greene, Euclid's Window is an extraordinary blend of rigorous, authoritative investigation and accessible, good-humored storytelling that makes a stunningly original argument asserting the primacy of geometry. For those who have looked through Euclid's Window, no space, no thing, and no time will ever be quite the same.

Muted Modernists

Analysis of both official and opposition Saudi divine politics is often monolithic, conjuring images of conservatism, radicalism, misogyny and resistance to democracy. Madawi Al-Rasheed challenges this stereotype as she examines a long tradition of engaging with modernism that gathered momentum with the Arab uprisings and incurred the wrath of both the regime and its Wahhabi supporters. With this nascent modernism, constructions of new divine politics, anchored in a rigorous reinterpretation of foundational Islamic texts and civil society activism are emerging in a context where authoritarian rule prefers its advocates to remain muted. The author challenges scholarly wisdom on Islamism in general and blurs the boundaries between secular and religious politics.

Easter 1916

Before Easter 1916 Dublin had been a city much like any other British city, comparable to Bristol or Liverpool and part of a complex, deep-rooted British world. Many of Dublin's inhabitants wanted to weaken or terminate London's rule but there remained a vast and conflicting range of visions of that future: far more immediate was the unfolding disaster of the First World War that had put 'home rule' issues on ice for the duration. The devastating events of that Easter changed everything. Both the rising itself and-even more significantly-the ferocious British response ended any sense at all that Dublin could be anything other than the capital of an independent country, as an entire nation turned away in revulsion from the British artillery and executions. As we approach the 90th anniversary of the rebellion it is time for a new account of what really happened over those fateful few days. What did the rebels actually hope to achieve? What did the British think they were doing? And how were the events really interpreted by ordinary people across Ireland? Vivid, authoritative and gripping, Easter 1916 is a major work.

De primatas a astronautas

Depois de O andar do bêbado e Subliminar, Mlodinow nos leva a mais uma grande jornada pelo mundo da ciência Uma odisseia repleta de descobertas e povoada por personagens fascinantes, cuja curiosidade insaciável conduziu nossa espécie, desde suas origens na savana africana até os dias de hoje. Mas como eles fizeram isso? Como saímos das cavernas para os automóveis, das árvores para os arranha-céus, de caminhar sobre dois pés para a exploração da Lua? Com sua habitual simplicidade, bom-humor e enorme erudição, Leonard Mlodinow explora as condições culturais que influenciaram o pensamento científico através dos tempos e as personalidades ímpares de grandes cientistas, filósofos e pensadores, como Galileu, Newton e Lavoisier. Um livro para os apaixonados pela ciência e para qualquer um interessado pelo pensamento criativo e a busca incessante de compreender o mundo. Informativo, acessível e intrigante, é um verdadeiro tributo à curiosidade humana. "Poderoso. [...] Mlodinow imprime nova vida à história da ciência." Publishers Weekly "Uma história incrível e muito prazerosa. ... [Mlodinow] é um especialista na popularização da ciência." Booklist "Fascinante... Uma viagem guiada e bem selecionada sobre o processo de acúmulo de conhecimentos da humanidade... Um apanhado de tirar o fôlego." Kirkus Review "Mlodinow faz um traçado vivo das revoluções do pensamento e da cultura que definem nossa civilização e, de bônus, apresenta uma estimulante visão da história e da majestosa abrangência da ciência moderna." V.S. Ramachandran, autor de O que o cérebro tem para contar

Wizards, Aliens, and Starships

Explaining the science behind science fiction and fantasy—from the probable to the impossible From teleportation and space elevators to alien contact and interstellar travel, science fiction and fantasy writers have come up with some brilliant and innovative ideas. Yet how plausible are these ideas--for instance, could Mr. Weasley's flying car in the Harry Potter books really exist? Which concepts might actually happen, and which ones wouldn’t work at all? Wizards, Aliens, and Starships delves into the most extraordinary details in science fiction and fantasy--such as time warps, shape changing, rocket launches, and illumination by floating candle--and shows readers the physics and math behind the phenomena. With simple mathematical models, and in most cases using no more than high school

algebra, Charles Adler ranges across a plethora of remarkable imaginings, from the works of Ursula K. Le Guin to Star Trek and Avatar, to explore what might become reality. Adler explains why fantasy in the Harry Potter and Dresden Files novels cannot adhere strictly to scientific laws, and when magic might make scientific sense in the muggle world. He examines space travel and wonders why it isn't cheaper and more common today. Adler also discusses exoplanets and how the search for alien life has shifted from radio communications to space-based telescopes. He concludes by investigating the future survival of humanity and other intelligent races. Throughout, he cites an abundance of science fiction and fantasy authors, and includes concise descriptions of stories as well as an appendix on Newton's laws of motion. Wizards, Aliens, and Starships will speak to anyone wanting to know about the correct--and incorrect--science of science fiction and fantasy.

The Hidden Geometry of Life: The Science and Spirituality of Nature

Encompassing nature, science, art, architecture, and spirituality, and illustrated with over 700 photographs and line drawings, The Hidden Geometry of Life illuminates the secret underpinnings of existence. In her trademark easy-to-understand style, mathematician Karen French shows how sacred geometry permeates every level of being, manifesting itself in simple shapes and numbers, music and sounds, light and color, even in the mysteries of creation itself. But these geometrical archetypes are more than the building blocks of reality: they are gateways to profound new levels of awareness.

Building Co-operation

However, in the second half of the twentieth century co-operatives experienced a protracted period of decline, facing a series of internal structural challenges, fierce competition amongst food retailers, and a rapidly-changing marketplace.

Unstoppable

Just as World War II called an earlier generation to greatness, so the climate crisis is calling today's rising youth to action: to create a better future. In UNSTOPPABLE, Bill Nye crystallizes and expands the message for which he is best known and beloved. That message is that with a combination of optimism and scientific curiosity, all obstacles become opportunities, and the possibilities of our world become limitless. With a scientist's thirst for knowledge and an engineer's vision of what can be, Bill Nye sees today's environmental issues not as insurmountable, depressing problems but as chances for our society to rise to the challenge and create a cleaner, healthier, smarter world. We need not accept that transportation consumes half our energy, and that two-thirds of the energy you put into your car is immediately thrown away out the tailpipe. We need not accept that dangerous emissions are the price we must pay for a vibrant economy and a comfortable life. Above all, we need not accept that we will leave our children a planet that is dirty, overheated, and depleted of resources. As Bill shares his vision, he debunks some of the most persistent myths and misunderstandings about global warming. When you are done reading, you'll be enlightened and empowered. Chances are, you'll be smiling, too, ready to join Bill and change the world. In Unstoppable: Harnessing Science to Change the World, the New York Times bestselling author of Undeniable: Evolution and the Science of Creation and former host of "Bill Nye the Science Guy" issues a new challenge to today's generation: to make a cleaner, more efficient, and happier world. Praise for UNDENIABLE: "With his charming, breezy, narrative style, Bill empowers the reader to see the natural world as it is, not as some would wish it to be. He does it right. And, as I expected, he does it best." -Neil deGrasse Tyson, Ph.D, host of COSMOS "Bill Nye, 'the Science Guy,' has become a veritable cultural icon....[T]he title of his new book on evolution...[is] 'Undeniable,' because, yes, there are many Americans who still deny what Darwin and other scientists long ago proved." -Frank Bruni, The New York Times "With a jaunty bow tie and boyish enthusiasm, Bill Nye the Science Guy has spent decades decoding scientific topics, from germs to volcanoes, for television audiences....In his new book, Nye delights in how [evolution] helps to unlock the mysteries of everything from bumblebees to human origins to our place in the universe." -National Geographic "When it comes to Bill Nye, 'Science Guy' doesn't even begin to cover it. When he's not being summoned to act as a voice of reason for news outlets or leading meetings as CEO of the Planetary Society, he is living the life of a best-selling author....His recently published book, 'Undeniable: Evolution and the Science of Creation,' enlightens readers while using a conversational, educational tone. After all, it's his ability to break down even the most complicated topics into bite-size pieces that made him such a hit on his '90s children's show 'Bill Nye, the Science Guy.'" -The Boston Globe "Mr. Nye writes briskly and accessibly...[and] makes an eloquent case for evolution."-The Wall Street Journal "Because [Bill

Nye is] a scientist, he has no doubts that the 'deniers' of evolution are flat wrong. And because he's a performer, his book is fun to read and easy to absorb." -The Washington Post "Ignite your inner scientist when Nye, known for delivering geeky intel with clarity and charm, takes on one of society's most hotly debated topics (yes, still)." -Time Out New York

Feynman's Rainbow

Einstein’s Dreams meets Tuesdays with Morrie in Leonard Mlodinow’s touching memoir about the guidance granted him by his mentor, the brilliant physicist Richard Feynman. For some, it was that special connection with a grandparent or a football coach, a boss, or a cleric. For Leonard Mlodinow, as a young physicist struggling to find his place in the world, the relationship that would most profoundly influence his life was with his mentor, the Nobel Prize-winning physicist Richard Feynman. Drawing on transcripts from his many meetings with Feynman during their time together at Cal Tech, Mlodinow shares Feynman’s provocative answers to such questions as “What is the nature of creativity?” and “How does a scientist think?” At once a moving portrait of a friendship and an affecting account of Feynman’s final, creative years, FEYNMAN’S RAINBOW celebrates the inspiring legacy of one of the greatest thinkers of our time.

The Quotable Feynman

A treasure-trove of illuminating and entertaining quotations from beloved physicist Richard P. Feynman "Some people say, ‘How can you live without knowing?' I do not know what they mean. I always live without knowing. That is easy. How you get to know is what I want to know."—Richard P. Feynman Nobel Prize–winning physicist Richard P. Feynman (1918–88) was that rarest of creatures—a towering scientific genius who could make himself understood by anyone and who became as famous for the wit and wisdom of his popular lectures and writings as for his fundamental contributions to science. The Quotable Feynman is a treasure-trove of this revered and beloved scientist's most profound, provocative, humorous, and memorable quotations on a wide range of subjects. Carefully selected by Richard Feynman's daughter, Michelle Feynman, from his spoken and written legacy, including interviews, lectures, letters, articles, and books, the quotations are arranged under two dozen topics—from art, childhood, discovery, family, imagination, and humor to mathematics, politics, science, religion, and uncertainty. These brief passages—about 500 in all—vividly demonstrate Feynman's astonishing yet playful intelligence, and his almost constitutional inability to be anything other than unconventional, engaging, and inspiring. The result is a unique, illuminating, and enjoyable portrait of Feynman's life and thought that will be cherished by his fans at the same time that it provides an ideal introduction to Feynman for readers new to this intriguing and important thinker. The book features a foreword in which physicist Brian Cox pays tribute to Feynman and describes how his words reveal his particular genius, a piece in which cellist Yo-Yo Ma shares his memories of Feynman and reflects on his enduring appeal, and a personal preface by Michelle Feynman. It also includes some previously unpublished quotations, a chronology of Richard Feynman's life, some twenty photos of Feynman, and a section of memorable quotations about Feynman from other notable figures. Features: Approximately 500 quotations, some of them previously unpublished, arranged by topic A foreword by Brian Cox, reflections by Yo-Yo Ma, and a preface by Michelle Feynman A chronology of Feynman's life Some twenty photos of Feynman A section of quotations about Feynman from other notable figures Some notable quotations of Richard P. Feynman: "The thing that doesn't fit is the most interesting." "Thinking is nothing but talking to yourself inside." "It is wonderful if you can find something you love to do in your youth which is big enough to sustain your interest through all your adult life. Because, whatever it is, if you do it well enough (and you will, if you truly love it), people will pay you to do what you want to do anyway." "I'd hate to die twice. It's so boring."

Coaching and Mentoring for Academic Development

Learning through dialogue brings a powerful opportunity to navigate professional demands and meet the challenges of a turbulent world. Written for all who mentor or coach in universities, this book addresses a critical question: how can mentoring and coaching be an effective and accessible way to support researcher and academic development?

The Drunkard's Walk

Leonard Mlodinow's The Drunkard's Walk: How Randomness Rules Our Lives is an exhilarating, eye-opening guide to understanding our random world. Randomness and uncertainty surround every-

thing we do. So why are we so bad at understanding them? The same tools that help us understand the random paths of molecules can be applied to the randomness that governs so many aspects of our everyday lives, from winning the lottery to road safety, and reveals the truth about the success of sporting heroes and film stars, and even how to make sense of a blood test. The Drunkard's Walk reveals the psychological illusions that prevent us understanding everything from stock-picking to wine-tasting - read it, or risk becoming another victim of chance. 'A wonderfully readable guide to how the mathematical laws of randomness affect our lives' Stephen Hawking, author of A Brief History of Time

Superforecasting

The international bestseller 'A manual for thinking clearly in an uncertain world. Read it.' Daniel Kahneman, author of Thinking, Fast and Slow _____ What if we could improve our ability to predict the future? Everything we do involves forecasts about how the future will unfold. Whether buying a new house or changing job, designing a new product or getting married, our decisions are governed by implicit predictions of how things are likely to turn out. The problem is, we're not very good at it. In a landmark, twenty-year study, Wharton professor Philip Tetlock showed that the average expert was only slightly better at predicting the future than a layperson using random guesswork. Tetlock's latest project – an unprecedented, government-funded forecasting tournament involving over a million individual predictions – has since shown that there are, however, some people with real, demonstrable foresight. These are ordinary people, from former ballroom dancers to retired computer programmers, who have an extraordinary ability to predict the future with a degree of accuracy 60% greater than average. They are superforecasters. In Superforecasting, Tetlock and his co-author Dan Gardner offer a fascinating insight into what we can learn from this elite group. They show the methods used by these superforecasters which enable them to outperform even professional intelligence analysts with access to classified data. And they offer practical advice on how we can all use these methods for our own benefit – whether in business, in international affairs, or in everyday life. _____ 'The techniques and habits of mind set out in this book are a gift to anyone who has to think about what the future might bring. In other words, to everyone.' Economist 'A terrific piece of work that deserves to be widely read . . . Highly recommended.' Independent 'The best thing I have read on predictions . . . Superforecasting is an indispensable guide to this indispensable activity.' The Times

The Fabric of the Cosmos

'A magnificent challenge to conventional ideas' Financial Times 'I thoroughly enjoyed this book. It manages to be both challenging and entertaining: it is highly recommended' the Independent '(Greene) send(s) the reader's imagination hurtling through the universe on an astonishing ride. As a popularizer of exquisitely abstract science, he is both a skilled and kindly explicator' the New York Times 'Greene is as elegant as ever, cutting through the fog of complexity with insight and clarity; space and time become putty in his hands' Los Angeles Times Book Review

The Brain That Changes Itself

An introduction to the science of neuroplasticity recounts the case stories of patients with mental limitations or brain damage whose seemingly unalterable conditions were improved through treatments that involved the thought re-alteration of brain structure.

Rûmî and Sufism

Nonfiction. Rumi is one of the great mystics of Islam. He founded in the XIIIth century a brotherhood in the Turkish city of Konya, famous for the use of music in the context of spiritual experience. To understand Rumi is to enter the world of Islam in its true sense: known as a "Sufi," Rumi is on par with the spiritual Masters of all great religious traditions. Written by Eva de Vitray-Meyerovitch, a French scholar who became a believer in Islam through her works on Sufism, this book is the best initiation not only to Rumi, but to Islamic thought: it is clear, elegant, scholarly, beautiful. It is an excellent tool for serious students of Islam as well as for the general public who wants to approach Islamic civilization with the respect and competence it requires. It should be on the program of any studies dealing with Islam, comparative studies of religions, the values and politics of the Islamic world. It is a key to the underlying world-view which it is impossible to understand without comprehending its spiritual roots. But this book is also about the life and writings of one of the great poets of the world.

Cosmic Order and Divine Power

The treatise De mundo offers a cosmology in the Peripatetic tradition which subordinates what happens in the cosmos to the might of an omnipotent god. Thus the work is paradigmatic for the philosophical and religious concepts of the early imperial age, which offer points of contact with nascent Christianity.

Albion's Seed

This fascinating book is the first volume in a projected cultural history of the United States, from the earliest English settlements to our own time. It is a history of American folkways as they have changed through time, and it argues a thesis about the importance for the United States of having been British in its cultural origins. While most people in the United States today have no British ancestors, they have assimilated regional cultures which were created by British colonists, even while preserving ethnic identities at the same time. In this sense, nearly all Americans are "Albion's Seed," no matter what their ethnicity may be. The concluding section of this remarkable book explores the ways that regional cultures have continued to dominate national politics from 1789 to 1988, and still help to shape attitudes toward education, government, gender, and violence, on which differences between American regions are greater than between European nations.

Conquering the Chaos

India is back! With the country’s general elections in 2014 resulting in a government formed by a new political party, the Bharatiya Janata Party, led by a business-friendly prime minister, Narendra Kumar Modi, the world’s largest democracy is once again on the minds of business leaders the world over. The renewal of interest in India is all the greater because of what’s happening in neighboring China. For over thirty years, China was the growth engine for many Western multinational companies, but the combination of a slowing economy, rising wages, and increasing political risk has most companies looking for the next China. No other country is better positioned to play that role than India. In the short term, though, India will remain a challenging market, with a well-deserved reputation for corruption, uncertainty, and stultifying bureaucracy. Those hurdles are unlikely to go away soon. Yet India may be on the verge of unprecedented growth. Can you afford to wait or should you plunge into this complex market today? What does it really take to win there? How do executives deal with India’s volatility, uncertainty, and intense competition—and even prosper from it? Ravi Venkatesan, the former Chairman of Microsoft India and Cummins India, offers expert advice on how your company can overcome the unique challenges of the Indian market. He argues that India is in fact an archetype for most developing nations, many of which present similar challenges. Succeeding in India is important not just because it is a big market but also because it is a litmus test for your corporation’s ability to succeed in other emerging markets. If you can win in India, you should be able to win anywhere. Hard as these frontier markets are, Venkatesan argues, the bigger hurdle may well be the internal culture and mind-set at a multinational’s headquarters. The unwillingness to make a long-term commitment or to adequately trust local leadership, combined with the propensity to rigidly replicate the products, business models, and operating systems that have worked at home, drives many companies into a “midway trap.” That often results in India remaining an irrelevantly small contributor to the company’s global growth and profits. Combining personal experience and in-depth interviews with CEOs and senior leaders at dozens of companies—including Microsoft, GE, JCB, Dell, Honeywell, Volvo, Bosch, Deere, Unilever, and Nestlé—Venkatesan shows you how to tackle political changes, policy uncertainty,

and corruption and thrive in India. He proves that you can break through, but it takes a very different type of leadership, both locally and at corporate headquarters. If you want to succeed in the twenty-first century, you must succeed in emerging markets. This practical book, written by one of India's most respected CEOs, gives you the keys to win in India, other emerging markets, and, indeed, globally.

The Story of Western Science: From the Writings of Aristotle to the Big Bang Theory

A riveting road map to the development of modern scientific thought. In the tradition of her perennial bestseller The Well-Educated Mind, Susan Wise Bauer delivers an accessible, entertaining, and illuminating springboard into the scientific education you never had. Far too often, public discussion of science is carried out by journalists, voters, and politicians who have received their science secondhand. The Story of Western Science shows us the joy and importance of reading groundbreaking science writing for ourselves and guides us back to the masterpieces that have changed the way we think about our world, our cosmos, and ourselves. Able to be referenced individually, or read together as the narrative of Western scientific development, the book's twenty-eight succinct chapters lead readers from the first science texts by Hippocrates, Plato, and Aristotle through twentieth-century classics in biology, physics, and cosmology. The Story of Western Science illuminates everything from mankind's earliest inquiries to the butterfly effect, from the birth of the scientific method to the rise of earth science and the flowering of modern biology. Each chapter recommends one or more classic books and provides entertaining accounts of crucial contributions to science, vivid sketches of the scientist-writers, and clear explanations of the mechanics underlying each concept. The Story of Western Science reveals science to be a dramatic undertaking practiced by some of history's most memorable characters. It reminds us that scientific inquiry is a human pursuit—an essential, often deeply personal, sometimes flawed, frequently brilliant way of understanding the world. The Story of Western Science is an "entertaining and unique synthesis" (Times Higher Education), a "fluidly written" narrative that "celebrates the inexorable force of human curiosity" (Wall Street Journal), and a "bright, informative resource for readers seeking to understand science through the eyes of the men and women who shaped its history" (Kirkus). Previously published as The Story of Science.

Emotional

We've all been told that thinking rationally is the key to success. But at the cutting edge of science, researchers are discovering that feeling is every bit as important as thinking. You make hundreds of decisions every day, from what to eat for breakfast to how you should invest, and not one of those decisions would be possible without emotion. It has long been said that thinking and feeling are separate and opposing forces in our behavior. But as Leonard Mlodinow, the best-selling author of Subliminal, tells us, extraordinary advances in psychology and neuroscience have proven that emotions are as critical to our well-being as thinking. How can you connect better with others? How can you make sense of your frustration, fear, and anxiety? What can you do to live a happier life? The answers lie in understanding your emotions. Journeying from the labs of pioneering scientists to real-world scenarios that have flirted with disaster, Mlodinow shows us how our emotions can help, why they sometimes hurt, and what we can learn in both instances. Using deep insights into our evolution and biology, Mlodinow gives us the tools to understand our emotions better and to maximize their benefits. Told with his characteristic clarity and fascinating stories, Emotional explores the new science of feelings and offers us an essential guide to making the most of one of nature's greatest gifts.

A Briefer History of Time

Like prior editions of the book - but even more so - A Briefer History of Time will guide non-scientists everywhere in the ongoing search for the tantalizing secrets at the heart of time and space . . . This is Stephen Hawking's somewhat 'briefer' account of his up-to-date and most recent scientific observations and findings. A great companion to his original worldwide bestseller, A Brief History of Time. From curved space to quantum theory, the authors have expanded on areas of special interest and recent progress, such as developments in string theory and exciting progress in the search for a force of complete, unified theory of all the forces of physics. Thirty-eight full-colour illustrations enhance the text and make A Briefer History of Time an exhilarating addition in its own right to the literature of science.