

Drift Into Failure: From Hunting Broken Components To Understanding Complex Systems

The second edition of a bestseller, Safety Differently: Human Factors for a New Era is a complete update of Ten Questions About Human Error: A New View of Human Factors and System Safety. Today, the unrelenting pace of technology change and growth of complexity calls for a different kind of safety thinking. Automation and new technologies have resu

Ten Questions About Human Error asks the type of questions frequently posed in incident and accident investigations, people's own practice, managerial and organizational settings, policymaking, classrooms, Crew Resource Management Training, and error research. It is one installment in a larger transformation that has begun to identify both deep-rooted constraints and new leverage points of views of human factors and system safety. The ten questions about human error are not just questions about human error as a phenomenon, but also about human factors and system safety as disciplines, and where they stand today. In asking these questions and sketching the answers to them, this book attempts to show where current thinking is limited--where vocabulary, models, ideas, and notions are constraining progress. This volume looks critically at the answers human factors would typically provide and compares/contrasts them with current research insights. Each chapter provides directions for new ideas and models that could perhaps better cope with the complexity of the problems facing human error today. As such, this book can be used as a supplement for a variety of human factors courses.

John Dewey's Democracy and Education addresses the challenge of providing quality public education in a democratic society. In this classic work Dewey calls for the complete renewal of public education, arguing for the fusion of vocational and contemplative studies in education and for the necessity of universal education for the advancement of self and society. First published in 1916, Democracy and Education is regarded as the seminal work on public education by one of the most important scholars of the century.

While many organizations see the value of creating a just culture they struggle when it comes to developing it. In this Second Edition, Dekker expands his views, additionally tackling the key issue of how justice is created inside organizations. Dekker also introduces new material on ethics and on caring for the 'second victim' (the professional at the centre of the incident). Consequently, we have a natural evolution of the author's ideas.

Patient Safety

Democracy and Education

Normal Accidents

Safety Ethics

Error, Guilt, Trauma, and Resilience

Morning in the Burned House

A Human Factors Approach

When the Space Shuttle Challenger exploded on January 28, 1986, millions of Americans became bound together in a single, historic moment. Many still vividly remember exactly where they were and what they were doing when they heard about the tragedy. Diane Vaughan recreates the steps leading up to that fateful decision, contradicting conventional interpretations to prove that what occurred at NASA was not skullduggery or misconduct but a disastrous mistake. Why did NASA managers, who not only had all the information prior to the launch but also were warned against it, decide to proceed? In retelling how the decision unfolded through the eyes of the managers and the engineers, Vaughan uncovers an incremental descent into poor judgment, supported by a culture of high-risk technology. She reveals how and why NASA insiders, when repeatedly faced with evidence that something was wrong, normalized the deviance so that it became acceptable to them. In a new preface, Vaughan reveals the ramifications for this book and for her when a similar decision-making process brought down NASA's Space Shuttle Columbia in 2003.

"This book shares how to instrument a company and most importantly, build an internal culture that values and uses data to maximum effect"--

On April 14, 1994, two U.S. Air Force F-15 fighters accidentally shot down two U.S. Army Black Hawk Helicopters over Northern Iraq, killing all twenty-six peacekeepers onboard. In response to this disaster the complete array of military and civilian investigative and judicial procedures ran their course. After almost two years of investigation with virtually unlimited resources, no culprit emerged, no bad guy showed himself, no smoking gun was found. This book attempts to make sense of this tragedy--a tragedy that on its surface makes no sense at all. With almost twenty years in uniform and a Ph.D. in organizational behavior, Lieutenant Colonel Snook writes from a unique perspective. A victim of friendly fire himself, he develops individual, group, organizational, and cross-level accounts of the accident and applies a rigorous analysis based on behavioral science theory to account for critical links in the causal chain of events. By explaining separate pieces of the puzzle, and analyzing each at a different level, the author removes much of the mystery surrounding the shutdown. Based on a grounded theory analysis, Snook offers a dynamic, cross-level mechanism he calls "practical drift"--the slow, steady uncoupling of practice from written procedure--to complete his explanation. His conclusion is disturbing. This accident happened because, or perhaps in spite of everyone behaving just the way we would expect them to behave, just the way theory would predict. The shutdown was a normal accident in a highly reliable organization.

An original and searching memoir from "one of America's finest essayists" (Phillip Lopate) When Scott Russell Sanders was four, his father held him in his arms during a thunderstorm, and he felt awe—"the tingle of a power that surges through bone and rain and everything." He says, "The search for communion with this power has run like a bright thread through all my days." A Private History of Awe is an account of this search, told as a series of awe-inspiring episodes: his early memory of watching a fire with his father; his attraction to the solemn cadences of the Bible despite his frustration with Sunday-school religion; his discovery of books and the body; his mounting opposition to the Vietnam War and all forms of violence; his decision to leave behind the university life of Oxford and Harvard and return to Indiana, where three generations of his family have put down roots. In many ways, this is the story of a generation's passage through the 1960s—from innocence to experience, from euphoria to disillusionment. But Sanders has found a language that captures the transcendence of ordinary lives while never reducing them to formula. In his hands, the pattern of American boyhood that was made classic by writers from Mark Twain to Tobias Wolff is given a powerful new charge.

The End of Heaven

How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter

Good Hunting

Disastrous Decisions

From Hunting Broken Components to Understanding Complex Systems

Towards a sustainable, participatory and inclusive wild meat sector

A Pathway towards Inclusive Globalization

For Resilience Engineering, 'failure' is the result of the adaptations necessary to cope with the complexity of the real world, rather than a breakdown or malfunction. The performance of individuals and organizations must continually adjust to current conditions and, because resources and time are finite, such adjustments are always approximate. This definitive new book explores this groundbreaking new development in safety and risk management, where 'success' is based on the ability of organizations, groups and individuals to anticipate the changing shape of risk before failures and harm occur. Featuring contributions from many of the worlds leading figures in the fields of human factors and safety, Resilience Engineering provides thought-provoking insights into system safety as an aggregate of its various components, subsystems, software, organizations, human behaviours, and the way in which they interact. The book provides an introduction to Resilience Engineering of systems, covering both the theoretical and practical aspects. It is written for those responsible for system safety on managerial or operational levels alike, including safety managers and engineers (line and maintenance), security experts, risk and safety consultants, human factors professionals and accident investigators. This title was first published in 2002: This field guide assesses two views of human error - the old view, in which human error becomes the cause of an incident or accident, or the new view, in which human error is merely a symptom of deeper

trouble within the system. The two parts of this guide concentrate on each view, leading towards an appreciation of the new view, in which human error is the starting point of an investigation, rather than its conclusion. The second part of this guide focuses on the circumstances which unfold around people, which causes their assessments and actions to change accordingly. It shows how to "reverse engineer" human error, which, like any other component, needs to be put back together in a mishap investigation.

In this book, Sidney Dekker sets out to identify the market mechanisms that explain how less government paradoxically leads to greater compliance burdens. This book gives shape and substance to a suspicion that has become widespread among workers in almost every industry: we have to follow more rules than ever—and still, things can go spectacularly wrong. Much has been privatized and deregulated, giving us what is sometimes known as 'new public management,' driven by neoliberal, market-favoring policies. But, paradoxically, we typically have more rules today, not fewer. It's not the government: it's us. This book is the first of a three-part series on the effects of 'neoliberalism,' which promotes the role of the private sector in the economy. Compliance Capitalism examines what aspects of the compliance economy, what mechanisms of bureaucratization, are directly linked to us having given free markets a greater reign over our political economy. The book steps through them, picking up the evidence and levers for change along the way. Dekker's work has always challenged readers to embrace more humane, empowering ways to think about work and its quality and safety. In Compliance Capitalism, Dekker extends his reach once again, writing for all managers, board members, organization leaders, consultants, practitioners, researchers, lecturers, students, and investigators curious to understand the genuine nature of organizational and safety performance.

Biodiversity-the genetic variety of life-is an exuberant product of the evolutionary past, a vast human-supportive resource (aesthetic, intellectual, and material) of the present, and a rich legacy to cherish and preserve for the future. Two urgent challenges, and opportunities, for 21st-century science are to gain deeper insights into the evolutionary processes that foster biotic diversity, and to translate that understanding into workable solutions for the regional and global crises that biodiversity currently faces. A grasp of evolutionary principles and processes is important in other societal arenas as well, such as education, medicine, sociology, and other applied fields including agriculture, pharmacology, and biotechnology. The ramifications of evolutionary thought also extend into learned realms traditionally reserved for philosophy and religion. The central goal of the In the Light of Evolution (ILE) series is to promote the evolutionary sciences through state-of-the-art colloquia-in the series of Arthur M. Sackler colloquia sponsored by the National Academy of Sciences-and their published proceedings. Each installment explores evolutionary perspectives on a particular biological topic that is scientifically intriguing but also has special relevance to contemporary societal issues or challenges. This tenth and final edition of the In the Light of Evolution series focuses on recent developments in phylogeographic research and their relevance to past accomplishments and future research directions.

*Living with High Risk Technologies - Updated Edition
Second Victim
A Novel*

Resilience Engineering

The Secret of Our Success

Lord of the Flies

Why So Many Predictions Fail--but Some Don't

Golding's iconic 1954 novel, now with a new foreword by Lois Lowry, remains one of the greatest books ever written for young adults and an unforgettable classic for readers of any age. This edition includes a new Suggestions for Further Reading by Jennifer Buehler. At the dawn of the next world war, a plane crashes on an uncharted island, stranding a group of schoolboys. At first, with no adult supervision, their freedom is something to celebrate. This far from civilization they can do anything they want. Anything. But as order collapses, as strange howls echo in the night, as terror begins its reign, the hope of adventure seems as far removed from reality as the hope of being rescued.

Accident investigation and risk assessment have for decades focused on the human factor, particularly 'human error'. This bias towards performance failures leads to a neglect of normal performance. It assumes that failures and successes have different origins so there is little to be gained from studying them together. Erik Hollnagel believes this assumption is false and that safety cannot be attained only by eliminating risks and failures. The alternative is to understand why things go right and to amplify that. The ETTO Principle looks at the common trait of people at work to adjust what they do to match the conditions. It proposes that this efficiency-thoroughness trade-off (ETTO) is normal. While in some cases the adjustments may lead to adverse outcomes, these are due to the same processes that produce successes.

Do you have a nagging feeling that your monitoring needs improvement, but you just aren't sure where to start or how to do it? Are you plagued by constant, meaningless alerts? Does your monitoring system routinely miss real problems? This is the book for you. Mike Julian lays out a practical approach to designing and implementing effective monitoring—from your enterprise application down to the hardware in a datacenter, and everything between. Practical Monitoring provides you with straightforward strategies and tactics for designing and implementing a strong monitoring foundation for your company. This book takes a unique vendor-neutral approach to monitoring. Rather than discuss how to implement specific tools, Mike teaches the principles and underlying mechanics behind monitoring so you can implement the lessons in any tool. Practical Monitoring covers essential topics including: Monitoring antipatterns Principles of monitoring design How to build an effective on-call rotation Getting metrics and logs out of your application

The meat of wild species, referred to in this report as 'wild meat', is an essential source of protein and a generator of income for millions of forest-living communities in tropical and subtropical regions. However, unsustainable harvest rates currently

Behind Human Error

Fahrenheit 451

Safety Differently

Theory, Methods and Application

Ten Questions About Human Error

Cases from Aviation, Healthcare and Occupational and Environmental Health

An Introduction to the Philosophy of Education,

How safe are hospitals? Why do some hospitals have higher rates of accident and errors involving patients? How can we accurately measure and assess staff attitudes towards safety? How can hospitals and other healthcare environments improve their safety culture and minimize harm to patients? These and other questions have been the focus of research within the area of Patient Safety Culture (PSC) in the last decade. More and more hospitals and healthcare managers are trying to understand the nature of the culture within their organisations and implement strategies for improving patient safety. The main purpose of this book is to provide researchers, healthcare managers and human factors practitioners with details of the latest developments within the theory and application of PSC within healthcare. It brings together contributions from the most prominent researchers and practitioners in the field of PSC and covers the background to work on safety culture (e.g. measuring safety culture in industries such as aviation and the nuclear industry), the dominant theories and concepts within PSC, examples of PSC tools, methods of assessment and their application, and details of the most prominent challenges for the future in the area. Patient Safety Culture: Theory, Methods and Application is essential reading for all of the professional groups involved in patient safety and healthcare quality improvement, filling an important gap in the current market. A totalitarian regime has ordered all books to be destroyed, but one of the book burners suddenly realizes their merit.

What does the collapse of sub-prime lending have in common with a broken jackscrew in an airliner 's tailplane? Or the oil spill disaster in the Gulf of Mexico with the burn-up of Space Shuttle Columbia? These were systems that drifted into failure. While pursuing success in a dynamic, complex environment with

limited resources and multiple goal conflicts, a succession of small, everyday decisions eventually produced breakdowns on a massive scale. We have trouble grasping the complexity and normality that gives rise to such large events. We hunt for broken parts, fixable properties, people we can hold accountable. Our analyses of complex system breakdowns remain depressingly linear, depressingly componential - imprisoned in the space of ideas once defined by Newton and Descartes. The growth of complexity in society has outpaced our understanding of how complex systems work and fail. Our technologies have gotten ahead of our theories. We are able to build things - deep-sea oil rigs, jackscrews, collateralized debt obligations - whose properties we understand in isolation. But in competitive, regulated societies, their connections proliferate, their interactions and interdependencies multiply, their complexities mushroom. This book explores complexity theory and systems thinking to understand better how complex systems drift into failure. It studies sensitive dependence on initial conditions, unruly technology, tipping points, diversity - and finds that failure emerges opportunistically, non-randomly, from the very webs of relationships that breed success and that are supposed to protect organizations from disaster. It develops a vocabulary that allows us to harness complexity and find new ways of managing drift.

Normal Accidents analyzes the social side of technological risk. Charles Perrow argues that the conventional engineering approach to ensuring safety--building in more warnings and safeguards--fails because systems complexity makes failures inevitable. He asserts that typical precautions, by adding to complexity, may help create new categories of accidents. (At Chernobyl, tests of a new safety system helped produce the meltdown and subsequent fire.) By recognizing two dimensions of risk--complex versus linear interactions, and tight versus loose coupling--this book provides a powerful framework for analyzing risks and the organizations that insist we run them. The first edition fulfilled one reviewer's prediction that it "may mark the beginning of accident research." In the new afterword to this edition Perrow reviews the extensive work on the major accidents of the last fifteen years, including Bhopal, Chernobyl, and the Challenger disaster. The new postscript probes what the author considers to be the "quintessential 'Normal Accident'" of our time: the Y2K computer problem.

Risky Technology, Culture, and Deviance at NASA, Enlarged Edition

New Poems

Practical Monitoring

The Human and Organisational Causes of the Gulf of Mexico Blowout

Drift into Failure

Human Factors for a New Era, Second Edition

Meltdown

"A sophisticated, deeply informed account of real life in the real CIA that adds immeasurably to the public understanding of the espionage culture—the good and the bad." —Bob Woodward Jack Devine ran Charlie Wilson's War in Afghanistan. It was the largest covert action of the Cold War, and it was Devine who put the brand-new Stinger missile into the hands of the mujahideen during their war with the Soviets, paving the way to a decisive victory against the Russians. He also pushed the CIA's effort to run down the narcotics trafficker Pablo Escobar in Colombia. He tried to warn the director of central intelligence, George Tenet, that there was a bullet coming from Iraq with his name on it. He was in Chile when Allende fell, and he had too much to do with Iran-Contra for his own taste, though he tried to stop it. And he tangled with Rick Ames, the KGB spy inside the CIA, and hunted Robert Hanssen, the mole in the FBI. *Good Hunting: An American Spymaster's Story* is the spellbinding memoir of Devine's time in the Central Intelligence Agency, where he served for more than thirty years, rising to become the acting deputy director of operations, responsible for all of the CIA's spying operations. This is a story of intrigue and high-stakes maneuvering, all the more gripping when the fate of our geopolitical order hangs in the balance. But this book also sounds a warning to our nation's decision makers: covert operations, not costly and devastating full-scale interventions, are the best safeguard of America's interests worldwide. Part memoir, part historical redress, *Good Hunting* debunks outright some of the myths surrounding the Agency and cautions against its misuses. Beneath the exotic allure—living abroad with his wife and six children, running operations in seven countries, and serving successive presidents from Nixon to Clinton—this is a realist, gimlet-eyed account of the Agency. Now, as Devine sees it, the CIA is trapped within a larger bureaucracy, losing swaths of turf to the military, and, most ominous of all, is becoming overly weighted toward paramilitary operations after a decade of war. Its capacity to do what it does best—spying and covert action—has been seriously degraded. *Good Hunting* sheds light on some of the CIA's deepest secrets and spans an illustrious tenure—and never before has an acting deputy director of operations come forth with such an account. With the historical acumen of Steve Coll's *Ghost Wars* and gripping scenarios that evoke the novels of John le Carré even as they hew closely to the facts on the ground, Devine offers a master class in spycraft.

Bookmark File PDF Drift Into Failure: From Hunting Broken Components To Understanding Complex Systems

NAMED A BEST BOOK OF 2018 BY THE FINANCIAL TIMES A groundbreaking take on how complexity causes failure in all kinds of modern systems--from social media to air travel--this practical and entertaining book reveals how we can prevent meltdowns in business and life "Endlessly fascinating, brimming with insight, and more fun than a book about failure has any right to be, *Meltdown* will transform how you think about the systems that govern our lives. This is a wonderful book."--Charles Duhigg, author of *The Power of Habit* and *Smarter Faster Better* A crash on the Washington, D.C. metro system. An accidental overdose in a state-of-the-art hospital. An overcooked holiday meal. Surprising new research shows that all these events--and the myriad failures that dominate headlines every day--share similar causes. By understanding what lies behind these failures, we can design better systems, make our teams more productive, and transform how we make decisions at work and at home. Weaving together cutting-edge social science with riveting stories that take us from the frontlines of the Volkswagen scandal to backstage at the Oscars, and from deep beneath the Gulf of Mexico to the top of Mount Everest, Chris Clearfield and András Tilcsik explain how the increasing complexity of our systems creates conditions ripe for failure and why our brains and teams can't keep up--with an emphasis on practical solutions. It's an eye-opening, empowering, and entirely original book--one that will change the way you see our complex world and your own place in it.

Much of the previous literature in the field of safety focuses on either the technical equipment issues or the human performance factors that contribute to the active failures in safety-critical systems. However, this book provides guidance in the moral or ethical aspects of decision-making that perpetuate many of the latent failures in safety-critical systems. The book provides a concise introduction to the ethical foundations and follows up with case studies from aviation, healthcare, and environmental and occupational health.

A Washington Post Best Book of 2021 ?The #1 New York Times bestselling investigative story of how three successive presidents and their military commanders deceived the public year after year about America's longest war, foreshadowing the Taliban's recapture of Afghanistan, by Washington Post reporter and three-time Pulitzer Prize finalist Craig Whitlock. Unlike the wars in Vietnam and Iraq, the US invasion of Afghanistan in 2001 had near-unanimous public support. At first, the goals were straightforward and clear: defeat al-Qaeda and prevent a repeat of 9/11. Yet soon after the United States and its allies removed the Taliban from power, the mission veered off course and US officials lost sight of their original objectives. Distracted

by the war in Iraq, the US military become mired in an unwinnable guerrilla conflict in a country it did not understand. But no president wanted to admit failure, especially in a war that began as a just cause. Instead, the Bush, Obama, and Trump administrations sent more and more troops to Afghanistan and repeatedly said they were making progress, even though they knew there was no realistic prospect for an outright victory. Just as the Pentagon Papers changed the public's understanding of Vietnam, The Afghanistan Papers contains "fast-paced and vivid" (The New York Times Book Review) revelation after revelation from people who played a direct role in the war from leaders in the White House and the Pentagon to soldiers and aid workers on the front lines. In unvarnished language, they admit that the US government's strategies were a mess, that the nation-building project was a colossal failure, and that drugs and corruption gained a stranglehold over their allies in the Afghan government. All told, the account is based on interviews with more than 1,000 people who knew that the US government was presenting a distorted, and sometimes entirely fabricated, version of the facts on the ground. Documents unearthed by The Washington Post reveal that President Bush didn't know the name of his Afghanistan war commander—and didn't want to meet with him. Secretary of Defense Donald Rumsfeld admitted that he had "no visibility into who the bad guys are." His successor, Robert Gates, said: "We didn't know jack shit about al-Qaeda." The Afghanistan Papers is a "searing indictment of the deceit, blunders, and hubris of senior military and civilian officials" (Tom Bowman, NRP Pentagon Correspondent) that will supercharge a long-overdue reckoning over what went wrong and forever change the way the conflict is remembered.

The Accidental Shootdown of U.S. Black Hawks over Northern Iraq

Winning with Data

The Signal and the Noise

Restoring Trust and Accountability in Your Organization, Third Edition

Effective Strategies for the Real World

Concepts and Precepts

Leviathan: The History of Whaling in America

A Los Angeles Times Best Non-Fiction Book of 2007 A Boston Globe Best Non-Fiction Book of 2007 Amazon.com Editors pick as one of the 10 best history books of 2007 Winner of the 2007 John Lyman Award for U. S. Maritime History, given by the North American Society for Oceanic History "The best history of American whaling to come along in a generation." —Nathaniel Philbrick The epic history of the "iron men in wooden boats" who built an industrial empire through the pursuit of whales. "To produce a mighty book, you must choose a mighty theme,"

Herman Melville proclaimed, and this absorbing history demonstrates that few things can capture the sheer danger and desperation of men on the deep sea as dramatically as whaling. Eric Jay Dolin begins his vivid narrative with Captain John Smith's botched whaling expedition to the New World in 1614. He then chronicles the rise of a burgeoning industry—from its brutal struggles during the Revolutionary period to its golden age in the mid-1800s when a fleet of more than 700 ships hunted the seas and American whale oil lit the world, to its decline as the twentieth century dawned. This sweeping social and economic history provides rich and often fantastic accounts of the men themselves, who mutinied, murdered, rioted, deserted, drank, scrimshawed, and recorded their experiences in journals and memoirs. Containing a wealth of naturalistic detail on whales, *Leviathan* is the most original and stirring history of American whaling in many decades.

Human error is cited over and over as a cause of incidents and accidents. The result is a widespread perception of a 'human error problem', and solutions are thought to lie in changing the people or their role in the system. For example, we should reduce the human role with more automation, or regiment human behavior by stricter monitoring, rules or procedures. But in practice, things have proved not to be this simple. The label 'human error' is prejudicial and hides much more than it reveals about how a system functions or malfunctions. This book takes you behind the human error label. Divided into five parts, it begins by summarising the most significant research results. Part 2 explores how systems thinking has radically changed our understanding of how accidents occur. Part 3 explains the role of cognitive system factors - bringing knowledge to bear, changing mindset as situations and priorities change, and managing goal conflicts - in operating safely at the sharp end of systems. Part 4 studies how the clumsy use of computer technology can increase the potential for erroneous actions and assessments in many different fields of practice. And Part 5 tells how the hindsight bias always enters into attributions of error, so that what we label human error actually is the result of a social and psychological judgment process by stakeholders in the system in question to focus on only a facet of a set of interacting contributors. If you think you have a human error problem, recognize that the label itself is no explanation and no guide to countermeasures. The potential for constructive change, for progress on safety, lies behind the human error label.

A just culture is a culture of trust, learning and accountability. It is particularly important when an incident has occurred; when something has gone wrong. How do you respond to the people involved? What do you do to minimize the negative impact, and maximize learning? This third edition of Sidney Dekker's extremely successful *Just Culture* offers new material on restorative justice and ideas about why your people may be breaking rules. Supported by extensive case material, you will learn about safety reporting and honest disclosure, about retributive just culture and about the criminalization of human error. Some suspect a just culture means letting people off the hook. Yet they believe they need to remain able to hold people accountable for undesirable performance. In this new edition, Dekker asks you to look at 'accountability' in different ways. One is by asking which rule was broken, who did it, whether that behavior crossed some line, and what the appropriate consequences should be. In this retributive sense, an 'account' is something you get people to pay, or settle. But who will draw that line? And is the process fair? Another way to approach accountability after an incident is to ask who was hurt. To ask what their needs are. And to explore whose obligation it is to meet those needs. People involved in causing the incident may well want to participate in meeting those needs. In this restorative sense, an 'account' is something you get people to tell, and others to listen to. Learn to look at accountability in different ways and your impact on restoring trust, learning and a sense of humanity in your organization could be enormous.

These beautifully crafted poems - by turns dark, playful, intensely moving, tender, and intimate - make up Margaret Atwood's most accomplished and versatile gathering to date, " setting foot on the middle ground / between body and word." Some draw on history, some on

myth, both classical and popular. Others, more personal, concern themselves with love, with the fragility of the natural world, and with death, especially in the elegiac series of meditations on the death of a parent. But they also inhabit a contemporary landscape haunted by images of the past. Generous, searing, compassionate, and disturbing, this poetry rises out of human experience to seek a level between luminous memory and the realities of the everyday, between the capacity to inflict and the strength to forgive.

Just Culture

The Afghanistan Papers

Drift Into Failure

The Challenger Launch Decision

The ETTO Principle: Efficiency-Thoroughness Trade-Off

Systems Thinking Applied to Safety

Why Things That Go Right Sometimes Go Wrong

*In this unique book, Sidney Dekker tackles a largely unexplored dilemma. Our scientific age has equipped us ever better to explain why things go wrong. But this increasing sophistication actually makes it harder to explain why we suffer. Accidents and disasters have become technical problems without inherent purpose. When told of a disaster, we easily feel lost in the steely emptiness of technical languages of engineering or medicine. Or, in our drive to pinpoint the source of suffering, we succumb to the hunt for a scapegoat, possibly inflicting even greater suffering on others around us. How can we satisfactorily deal with suffering when the disaster that caused it is no more than the dispassionate sum of utterly mundane, imperfect human decisions and technical failures? Broad in its historical sweep and ambition, *The End of Heaven* is also Dekker's most personal book to date. How our collective intelligence has helped us to evolve and prosper Humans are a puzzling species. On the one hand, we struggle to survive on our own in the wild, often failing to overcome even basic challenges, like obtaining food, building shelters, or avoiding predators. On the other hand, human groups have produced ingenious technologies, sophisticated languages, and complex institutions that have permitted us to successfully expand into a vast range of diverse environments. What has enabled us to dominate the globe, more than any other species, while remaining virtually helpless as lone individuals? This book shows that the secret of our success lies not in our innate intelligence, but in our collective brains—on the ability of human groups to socially interconnect and learn from one another over generations. Drawing insights from lost European explorers, clever chimpanzees, mobile hunter-gatherers, neuroscientific findings, ancient bones, and the human genome, Joseph Henrich demonstrates how our collective brains have propelled our species' genetic evolution and shaped our biology. Our early capacities for learning from others produced many cultural innovations, such as fire, cooking, water containers, plant knowledge, and projectile weapons, which in turn drove the expansion of our brains and altered our physiology, anatomy, and psychology in crucial ways. Later on, some collective brains generated and recombined powerful concepts, such as the lever, wheel, screw, and writing, while also creating the institutions that continue to alter our motivations and perceptions. Henrich shows how our genetics and biology are inextricably interwoven with cultural evolution, and how culture-gene interactions launched our species on an extraordinary evolutionary trajectory. Tracking clues from our ancient past to the present, *The Secret of Our Success* explores how the evolution of both our cultural and social natures produce a collective intelligence that explains both our species' immense success and the origins of human uniqueness. *The Belt and Road Initiative* (hereafter BRI) of China has attracted worldwide attention and participation, causing a lot of debate over its implications for international society. Although it is still in a budding stage, the BRI seems to afford a framework for an increasing number of countries to explore jointly new international economic governance mechanisms and offer significant opportunities for them to cope jointly with global challenges. Taking*

a globalization perspective and tracking the ancient silk roads, this book tries to examine the general context in which the BRI is raised and implemented, arguing that this Chinese initiative, instead of replacing existing international cooperation mechanisms, is a call for the reform and development of neoliberal globalization and will open up a new era of inclusive globalization. Inclusive globalization is neither an overturning nor a simple continuation of neoliberal globalization but rather a proposal capable of addressing the problems of existing globalization. The difference between them lies in the fact that globalization cannot only serve the "spatial fix" of capital but also has to meet the needs of living people. The book also addresses a number of major issues on building the Belt and Road and contains Chinese media's interviews with the author on various BRI issues. Given the author has been intensively involved in the study of and planning for the BRI, the book offers a valuable academic insight into this Chinese initiative.

Work has never been as safe as it seems today. Safety has also never been as bureaucratized as it is today. Over the past two decades, the number of safety rules and statutes has exploded, and organizations themselves are creating ever more internal compliance requirements. At the same time, progress on safety has slowed to a crawl. Many incident- and injury rates have flatlined. Worse, excellent safety performance on low-consequence events tends to increase the risk of fatalities and disasters. Bureaucracy and compliance now seem less about managing the safety of the workers we are responsible for, and more about managing the liability of the people they work for. We make workers do a lot that does nothing to improve their success locally. Paradoxically, such tightening of safety bureaucracy robs us of exactly the source of human insight, creativity and resilience that can tell us how success is actually created, and where the next accident may well happen. It is time for Safety Anarchists: people who trust people more than process, who rely on horizontally coordinating experiences and innovations, who push back against petty rules and coercive compliance, and who help recover the dignity and expertise of human work.

Compliance Capitalism

The Belt and Road Initiative

Odyssey

A New View of Human Factors and System Safety

The Safety Anarchist

A Secret History of the War

A Private History of Awe

This book explores complexity theory and systems thinking to better understand how complex systems drift into failure. It studies sensitive dependence on initial conditions, unruly technology, tipping points, diversity - and finds that failure emerges opportunistically, non-randomly, from the very webs of relationships that breed success and that are supposed to protect organizations from disaster. It develops a vocabulary that allows us to harness complexity and find new ways of managing drift.

How do people cope with having "caused" a terrible accident? How do they cope when they survive and have to live with the consequences ever after? We tend to blame and forget professionals who cause incidents and accidents, but they are victims too. They are second victims whose experiences of an incident or adverse event can be as traumatic as that of the first victims'. Yet information on second victimhood and its relationship to safety, about what is known and what organizations might need to do, is difficult to find. Thoroughly exploring an emerging topic with great relevance to safety culture, *Second Victim: Error, Guilt, Trauma, and Resilience* examines the lived experience of second

victims. It goes through what we know about trauma, guilt, forgiveness, and injustice and how these might be felt by the second victim. The author discusses how to conduct investigations of incidents that do not alienate second victims or make them feel even worse. It explores the importance support and resilience and where the responsibilities for creating it may lie. Drawing on his unique background as psychologist, airline pilot, and safety specialist, and his own experiences with helping second victims from a variety of backgrounds, Sidney Dekker has written a powerful, moving account of the experience of the second victim. It forms compelling reading for practitioners, risk managers, human resources managers, safety experts, mental health workers, regulators, the judiciary, and many other professionals. Dekker provides a strong theoretical background to promote understanding of the situation of the second victim and solid practical advice about how to deal with trauma that continues after an event leading to preventable harm or even avoidable death of a patient, consumer, or colleague. Listen to Sidney Dekker speak about his book

Takes the reader into the realm of human and organisational factors that contributed to the Deepwater Horizon disaster in 2010. This event resulted in the loss of 11 lives, the sinking of the rig and untold damage to the environment. It is important to know what people did, but even more important to know why they did it. Hopkins from ANU.

Increased concern for patient safety has put the issue at the top of the agenda of practitioners, hospitals, and even governments. The risks to patients are many and diverse, and the complexity of the healthcare system that delivers them is huge. Yet the discourse is often oversimplified and underdeveloped. Written from a scientific, human factors perspective, *Patient Safety: A Human Factors Approach* delineates a method that can enlighten and clarify this discourse as well as put us on a better path to correcting the issues. People often think, understandably, that safety lies mainly in the hands through which care ultimately flows to the patient—those who are closest to the patient, whose decisions can mean the difference between life and death, between health and morbidity. The human factors approach refuses to lay the responsibility for safety and risk solely at the feet of people at the sharp end. That is where we should intervene to make things safer, to tighten practice, to focus attention, to remind people to be careful, to impose rules and guidelines. The book defines an approach that looks relentlessly for sources of safety and risk everywhere in the system—the designs of devices; the teamwork and coordination between different practitioners; their communication across hierarchical and gender boundaries; the cognitive processes of individuals; the organization that surrounds, constrains, and empowers them; the economic and human resources offered; the technology available; the political landscape; and even the culture of the place. The breadth of the human factors approach is itself testimony to the realization that there are no easy answers or silver bullets for resolving the issues in patient safety. A user-friendly introduction to the approach, this book takes the complexity of health care seriously and doesn't oversimplify the problem. It demonstrates what the approach does do, that is offer the substance and guidance to consider the issues in all their nuance and complexity.

The Field Guide to Human Error Investigations

Disaster and Suffering in a Scientific Age

Friendly Fire

Volume X: Comparative Phylogeography

Patient Safety Culture

An American Spymaster's Story

In the Light of Evolution

A new approach to safety, based on systems thinking, that is more effective, less costly, and easier to use than current techniques. Engineering has experienced a technological revolution, but the basic engineering techniques applied in safety and reliability engineering, created in a simpler, analog world, have changed very little over the years. In this groundbreaking book, Nancy Leveson proposes a new approach to safety—more suited to today's complex, sociotechnical, software-intensive world—based on modern systems thinking and systems theory. Revisiting and updating ideas pioneered by 1950s aerospace engineers in their System Safety concept, and testing her new model extensively on real-world examples, Leveson has created a new approach to safety that is more effective, less expensive, and easier to use than current techniques. Arguing that traditional models of causality are inadequate, Leveson presents a new, extended model of causation (Systems-Theoretic Accident Model and Processes, or STAMP), then shows how the new model can be used to create techniques for system safety engineering, including accident analysis, hazard analysis, system design, safety in operations, and management of safety-critical systems. She applies the new techniques to real-world events including the friendly-fire loss of a U.S. Blackhawk helicopter in the first Gulf War; the Vioxx recall; the U.S. Navy SUBSAFE program; and the bacterial contamination of a public water supply in a Canadian town. Leveson's approach is relevant even beyond safety engineering, offering techniques for “reengineering” any large sociotechnical system to improve safety and manage risk.

UPDATED FOR 2020 WITH A NEW PREFACE BY NATE SILVER "One of the more momentous books of the decade."

—The New York Times Book Review Nate Silver built an innovative system for predicting baseball performance, predicted the 2008 election within a hair's breadth, and became a national sensation as a blogger—all by the time he was thirty. He solidified his standing as the nation's foremost political forecaster with his near perfect prediction of the 2012 election. Silver is the founder and editor in chief of the website FiveThirtyEight. Drawing on his own groundbreaking work, Silver examines the world of prediction, investigating how we can distinguish a true signal from a universe of noisy data. Most predictions fail, often at great cost to society, because most of us have a poor understanding of probability and uncertainty. Both experts and laypeople mistake more confident predictions for more accurate ones. But overconfidence is often the reason for failure. If our appreciation of uncertainty improves, our predictions can get better too. This is the “prediction paradox”: The more humility we have about our ability to make predictions, the more successful we can be in planning for the future. In keeping with his own aim to seek truth

from data, Silver visits the most successful forecasters in a range of areas, from hurricanes to baseball to global pandemics, from the poker table to the stock market, from Capitol Hill to the NBA. He explains and evaluates how these forecasters think and what bonds they share. What lies behind their success? Are they good—or just lucky? What patterns have they unraveled? And are their forecasts really right? He explores unanticipated commonalities and exposes unexpected juxtapositions. And sometimes, it is not so much how good a prediction is in an absolute sense that matters but how good it is relative to the competition. In other cases, prediction is still a very rudimentary—and dangerous—science. Silver observes that the most accurate forecasters tend to have a superior command of probability, and they tend to be both humble and hardworking. They distinguish the predictable from the unpredictable, and they notice a thousand little details that lead them closer to the truth. Because of their appreciation of probability, they can distinguish the signal from the noise. With everything from the health of the global economy to our ability to fight terrorism dependent on the quality of our predictions, Nate Silver's insights are an essential read.

Transform Your Culture, Empower Your People, and Shape the Future

Relying on human expertise and innovation, reducing bureaucracy and compliance

What Plane Crashes, Oil Spills, and Dumb Business Decisions Can Teach Us About How to Succeed at Work and at Home

Balancing Safety and Accountability

Engineering a Safer World

How Free Markets Have Led to Unfree, Overregulated Workers