

THE
DELUSIONS
OF CROWDS

PRELUDE

Nearly two centuries ago, a young Scotsman named Charles Mackay simultaneously attacked the subjects of God and Mammon in memorable style. Born in 1814, he enjoyed a distinguished literary career as a popular poet, writer of ballads, and American Civil War correspondent and editor for British newspapers. But posterity remembers him best for his 1841 authorship, at the tender age of twenty-seven, of *Memoirs of Extraordinary Popular Delusions*, which narrated multiple historical episodes of mass mania, several of which had to do with either religion or money.¹ It has been in print ever since.

Mackay chronicled the end-times delusions that supposedly gripped Europe as it approached the year A.D. 1000, as well as the remarkable religious madness of the Crusades. The book's best known chapters, though, detail the financial mass delusions of the Dutch tulipmania of the 1630s and the twin stock market bubbles in Paris and London in 1719–1720. These episodes, which constitute the first three chapters, are what propelled the book to its long-lasting fame.* Successive financial manias followed the book's publication with such frequency, regularity, and global impact that, nearly two centuries after it was written, the book is still required reading among finance professionals.²

Mackay was certainly not the first to intuit the contagious nature of human irrationality. Consider, for example, this passage from Herodotus:

When [Darius] was king of Persia, he summoned the Greeks who happened to be present at his court, and asked them what they would take to eat the dead bodies of their fathers. They replied that they would not do it for any money in the world. Later, in the presence of

* The book was subsequently renamed *Memoirs of Extraordinary Popular Delusions and the Madness of Crowds*, and hereafter is referred to simply as *Extraordinary Popular Delusions*.

the Greeks, and through an interpreter, so that they could understand what was said, he asked some Indians, of the tribe called Callatiae, who do in fact eat their parents' dead bodies, what they would take to burn them. They uttered a cry of horror and forbade him to mention such a dreadful thing. One can see by this what custom can do, and Pindar, in my opinion, was right when he called it "king of all."³

The Greeks, after all, were antiquity's intellectuals, and Darius must have been tickled to box their rhetorical ears. His unspoken messages to the Greeks: You may be the most learned among humankind, but you are just as irrational as the rest of us; you are simply better at rationalizing just why, despite all evidence to the contrary, you are still right.

While the ancients and Mackay were well acquainted with human irrationality and popular manias, they could not know their precise biological, evolutionary, and psychosocial wellsprings. Mackay, for example, must have asked himself exactly why groups of people, from time to time, chase the same ludicrously overpriced investments en masse.

Today, we have a much better idea of how this happens. In the first place, financial economists have discovered that human beings intuitively seek out outcomes with very high but very rare payoffs, such as lottery tickets, that on average lose money but tantalize their buyers with the chimera of unimaginable wealth. In addition, over the past several decades, neuroscientists have uncovered the basic anatomic and psychological mechanism behind both greed and fear: the so-called limbic system, which lies close by the vertical plane that divides the brain between its right and left hemispheres. One symmetrically placed pair of the limbic system's structures, the nuclei accumbens (singular: nucleus accumbens), lie approximately behind each eye, while another pair, the amygdalae (singular: amygdala), sit just under the temples.

Using functional magnetic resonance imaging (fMRI), researchers have found that the nuclei accumbens fire not only with reward, but even more intensely with its anticipation, be it culinary, sexual, social, or financial. In contrast, the amygdalae fire with disgust, fear, and revulsion. If, for example, you adore your aunt Flo's lasagna, your nuclei accumbens and their connections will fire ever more rapidly on the way over to her house, and likely peak just as the aroma wafts from the serving dish. But as soon as the first bite is taken, their firing rate decreases, and if your

aunt informs you upon arrival that she's burned the dish, they will almost completely cease firing.⁴

The benefit of an active anticipatory circuitry seems obvious; Mother Nature favors those who anticipate and strive, whereas the enjoyment of satiation, once achieved, offers little evolutionary advantage. And few things likely stimulate the nuclei accumbens as does the knowledge that some of those around us are becoming effortlessly wealthy. As economic historian Charles Kindleberger observed, "There is nothing so disturbing to one's well-being and judgment as to see a friend get rich."⁵

Novelists and historians have known for centuries that people do not deploy the powerful human intellect to dispassionately analyze the world, but rather to rationalize how the facts conform to their emotionally derived preconceptions. Journalist David Halberstam's magisterial *The Best and the Brightest* illustrated how the nation's most brilliant policy makers deluded themselves about American military involvement in Vietnam, a tendency once again evident; our recent foreign adventures suggest that we have not successfully climbed that particular learning curve.⁶

Over the past several decades, psychologists have accumulated experimental data that dissect the human preference of rationalization over rationality. When presented with facts and data that contradict our deeply held beliefs, we generally do not reconsider and alter those beliefs appropriately. More often than not, we avoid contrary facts and data, and when we cannot avoid them, our erroneous assessments will occasionally even harden and, yet more amazingly, make us more likely to proselytize them. In short, human "rationality" constitutes a fragile lid perilously balanced on the bubbling cauldron of artifice and self-delusion so lucidly illustrated by Mackay.

Mackay's own behavior demonstrated just how susceptible even the most rational and well-informed observers can be to a financial mania. Shortly after he published *Extraordinary Popular Delusions* in 1841, England experienced a financial mania that revolved around the great high-tech industry of the time, the railroad, which was even larger than the twin bubbles that swept Paris and London in 1719–1720. Investors, greedy for stocks, underwrote the increase in England's track mileage from two thousand in 1843 to five thousand in 1848, and thousands of more miles were planned but never built when shares finally went bust. If anyone should have foreseen the collapse, it was Mackay.

He did not. During that mania, he served as the editor of the *Glasgow Argus*, where he covered the ongoing railroad construction with a notable lack of skepticism, and when he published the second edition of *Extraordinary Popular Delusions* in 1852, he gave it only a brief footnote.

Financial manias can be thought of as a tragedy like *Hamlet* or *Macbeth*, with sharply defined characters, a familiar narrative arc, and well-rehearsed lines. Four dramatis personae control the narrative: the talented yet unscrupulous promoters of schemes; the gullible public who buys into them; the press that breathlessly fans the excitement; and last, the politicians who simultaneously thrust their hands into the till and avert their eyes from the flaming pyre of corruption.

The promoters follow a classical Shakespearean tragic path and are consequently the most fascinating of the actors. Most begin as brilliant, hardworking visionaries who intuit before others the riches that a new technology will bestow upon society. In the process of bringing their visions to fruition, they grow rich and powerful and, in a capitalist society that judges men by their wealth, become their nation's lions. When the speculation runs its course and bursts, they wind up disgraced and bankrupt and usually, but not always, narrowly escape the jailer.

The public proves easy pickings for the blandishments of the heroic, charismatic promoters. Competent investing requires a rare combination of mathematical ability, technological expertise, and, most critically, a working knowledge of economic history. Alas, people greatly prefer stories to data and facts; when faced with such a daunting task, humans default into narrative mode, and perhaps the most pleasing story of all is one that involves the effortless wealth to be had from buying into a new technology.

The press falls prey to the promoters in the same way as the public. Few things corrode journalistic excellence as the ease of writing about the revolutionary ventures of brilliant businessmen, who with alarming frequency grace magazine covers, first as heroes, then as accused felons.

Finally, financial manias sweep into their ambit politicians, whose reputations and popularity are enhanced by the economic prosperity that temporarily results from speculative excess, and who not infrequently get caught raiding the cookie jar.

The narrative arc of financial manias does not vary much either. Most speculative episodes combine two factors: exciting new technologies that foretell prosperity for all, and easy credit. Today in the United States, only

about 10 percent of the money supply consists of actual circulating bills and coins; the rest exists as credit that can be created, within limits, at will by the banking system. That, in turn, depends upon how optimistic banks, mortgage companies, and other lenders are that they will be repaid. This process is such a counterintuitive and shocking notion that it bears repeating: banks print money. Indeed, they are as manic-depressive as the public they serve, and in the midst of the euphoria of a bubble, banks often fan the flames of speculation by “making money” with abandon, as occurred most spectacularly in the run-up to the 2007–2009 financial crisis.

Four characteristic subplots accompany a bubble. First and foremost, financial speculation begins to dominate all but the most mundane social interactions; whenever and wherever people meet, they talk not of the weather, family, or sports, but rather of stocks and real estate. Next, otherwise sensible professionals quit reliable, good-paying jobs to speculate in the aforementioned assets. Further, skepticism is often met with vehemence; while there are always some folks old enough, and with memories long enough, to have seen the play before and to know how it ends, their warnings are met with scorn and ridicule, which over the past several decades has been usually capped with these five words: “You just don’t get it.” Finally, normally sedate observers begin to make outlandish financial forecasts. Asset prices are predicted to not merely move 10, 20, or 30 percent up or down in a given year, but rather will double, triple, or add a zero.

Beyond its three chapters on financial manias, *Extraordinary Popular Delusions* also contained three long chapters on religious manias: one each on biblical prophecy, the Crusades, and the pursuit of witches. While religious and financial manias might seem to have little in common, the underlying forces that give them rise are identical: the desire to improve one’s well-being in this life or the next. And the factors that amplify the contagion of financial and religious mass delusions are also similar: the hardwired human propensity to imitate, to fabricate and consume compelling narratives, and to seek status.

Religious manias seem a near constant feature of human history, a fairly recent example of which was the Solar Temple tragedy. On the evening of October 4, 1994, residents of the Swiss village of Cheiry were

startled by flames coming from a farmhouse perched above the town, where firefighters encountered a bizarre, ghastly sight: twenty-two bodies, most wearing red, black, or white capes, with a few women wearing golden ones. All but three of the victims had been shot, and in addition, ten had plastic bags over their heads. Most were found lying in a circle, their heads pointed outward; shell casings and empty champagne bottles littered the floor.

This was only the beginning; over the next two and a half years, dozens more murder/suicide victims were discovered in Switzerland and Canada, a total of seventy-four dead, all sect members or their children; all of the deaths that followed those at Cheiry occurred within a few days of either an equinox or solstice.

Two men led the sect: a mysterious, charming, and attractive forty-six-year-old Belgian physician named Luc Jouret, who had fled conspiracy and weapons charges in Canada in 1993; and a seventy-year-old French-Canadian named Joseph Di Mambro. Among the eventual victims were the wife and son of Jean Vuarnet, a revered 1960 French Olympic ski gold medalist who later licensed his famous name to an international sunglass manufacturer. Before his death, the young Vuarnet told a reporter, “The theme of the passage from life to death came up again and again. Jouret explained that there was nothing to fear—quite the contrary. I began to feel close to sacrifice.”⁷

The last Solar Temple victims were discovered on March 24, 1997; two days later, police in Rancho Santa Fe, near San Diego, found the bodies of thirty-nine members of another end-times group, the Heaven’s Gate religious sect, who had also died around the same equinox and believed that after death they would be transported off the planet by a spacecraft hidden in the tail of Comet Hale-Bopp.⁸

The Solar Temple and the Heaven’s Gate religious sects are just two examples in a long list of well known modern apocalyptic end-times groups: Jim Jones’s Peoples Temple, whose mass-suicide/murders in Guyana in 1978 took the lives of 918; the Branch Davidians, whose standoff with clueless federal authorities in Waco, Texas, killed 86 in 1993; and the murderous Japanese Aum Shinrikyo doomsday group, who perpetrated the 1995 Tokyo subway nerve gas attack. What’s striking about all these groups is that so many of their members, like Jouret and Vuarnet, were highly educated and accomplished.

Nor are end-times mass delusions peculiar to the modern world; medieval Europe produced a bumper crop of spectacular, if less well remembered, episodes. Modern neuropsychological research sheds some light on why groups of otherwise sane, intelligent, and well-adjusted people delude themselves that the world is going to end in a particular way and, oftentimes on a particular date. Humans understand the world through narratives; however much we flatter ourselves about our individual rationality, a good story, no matter how analytically deficient, lingers in the mind, resonates emotionally, and persuades more than the most dispositive facts or data.

More recently, psychologists have begun to appreciate just how effectively arresting narratives corrode our analytical ability. Perhaps the most compelling of all stories is the end-times narrative; if we understand our existence in narrative, then we all want to know its denouement. The end-times story is solidly embedded in many of the world's religions, and especially in all three Abrahamic ones, so pervasive that it has become nearly invisible, lurking behind many of every day's headlines and tweets, and so old that it goes at least as far back as, and likely further than, the dawn of civilization.

Not only does the hunger to know "the rest of the story" gnaw deeply into our consciousness; end-times narratives possess yet another irresistible attraction: the promise of delivery from a human existence famously labeled by Thomas Hobbes as "solitary, poor, nasty, brutish, and short" and pervaded with a corruption that favors the wealthy and powerful at the expense of the righteous. Few narratives comfort as well as one that promises the return of a savior who will turn over the table and set things right. This yearning for mankind's fresh start is deeply embedded in the Bible, most especially in the books of Ezekiel, Daniel, and Revelation, which have supplied the blueprints for several bloody end-times movements.

The nascent field of evolutionary psychology provides a convincing mechanism for the spread of mass manias. Within the space of approximately ten thousand years after the first tribes crossed over from Siberia into North America at the end of the last Ice Age, humans had established themselves from the subarctic to the Great Plains to the tropical Amazon Basin. Biological evolution could not have proceeded rapidly enough to favor the very specific skills needed to survive in such varied environments; it

would have taken far too long, for example, to have evolved a genetically derived talent for kayak-making on the subarctic coast, then a talent for buffalo-hunting on the Great Plains, followed by one for making poison blowguns in the Amazon. (The most rapid known human evolutionary adaptations—the development of adult lactose tolerance among northern Europeans and high-altitude tolerance in Tibetans—are estimated to have taken 3,000 to 10,000 years.)⁹

Rather than hardwire into our genes a distinct ability for making kayaks, hunting buffalo, or fashioning poison blowguns, evolution instead encoded the general-purpose skill of imitation. Given a large enough population and enough trial and error, someone will eventually figure out how to build, for example, a serviceable kayak, and the rest can accurately imitate the process.¹⁰

We imitate more than other animal species; as soon as someone creates a useful innovation, others quickly adopt it. Yet our propensity to imitate also serves to amplify maladaptive behaviors, primary among which are delusional beliefs. Admittedly, in a modern postindustrial society, the imitative acquisition of skills does improve our economic potential, but it does far less to promote survival than it did, say, in the premodern era in the subarctic, Great Plains, or Amazon Basin. Thus, in the modern world, the tradeoff between imitating adaptive and maladaptive behaviors has become less favorable than it had been in the past, and we are now stuck with a late-Pleistocene imitative predisposition that has become increasingly costly in the modern age, one of the most expensive and dangerous being the spread of the belief that the world will soon end.

Not only do people respond more to narratives than to facts and data, but preliminary studies demonstrate that the more compelling the story, the more it erodes our critical-thinking skills.¹¹ This research suggests, in addition, an inherent conflict of interest between the suppliers and consumers of opinion: the former wish to convince and will devise the most compelling narratives possible, whereas the latter, if they are rational, should intentionally avoid those narratives and rely only on data, facts, and analytical discipline.

Closely related to our preference for compelling narratives is the human tendency for self-deception. Since humans are adept at detecting the “tells” that others are lying, the ability to deceive oneself eliminates the tells, and so makes one a better deceiver.¹² Throughout history, relatively

few of the protagonists of religious mass delusions were the con men they seemed to skeptical outsiders, but rather the sincerely self-deceived victims of their own delusions.

Beginning about 150 years ago, Protestant Christianity evolved a doctrine, technically known as “dispensational premillennialism” (for short, “dispensationalism”), which its modern advocates have honed into the world’s most compelling end-times narrative. Although its precise content varies depending on the theological flavor, the basic narrative predicts that the Jews return to Israel, rebuild the Jerusalem Temple, and there resume sacrifices. The Roman Empire then reassembles itself in the form of a ten-member confederation under the leadership of a charismatic, brilliant, and handsome individual who turns out to be the Antichrist, the earthly manifestation of the Devil, who enters into a seven-year alliance with the Jews. After three and a half years, the Antichrist betrays the Jews and thus precipitates an invasion of Israel not only by the Russians, but also by two hundred million Chinese, who travel over the Himalayas to get there.

A cataclysmic nuclear war ensues: Armageddon, along with other horrors, collectively known as the Tribulation. At the end of the seven-year period, Christ returns to defeat the Antichrist and establish the millennium. Along the way, billions die. Christians who have found Jesus are conveniently saved from Armageddon and the Tribulation by being transported up into heaven—the Rapture—which occurs right before the trouble starts. The Jews come off somewhat less well; a third of them convert to Christianity and proselytize the rest of humanity and so survive the Tribulation. The other two-thirds are out of luck.

The current polarization of American society cannot be fully understood without a working knowledge of the above dispensationalist narrative, which strikes the majority of well-educated citizens with a secular orientation as bizarre. In contrast, for a significant minority of Americans, this sequence of prophesized events is as familiar as *Romeo and Juliet* or *The Godfather*, and the appeal of televangelists such as Jerry Falwell, Jim Bakker, and Jimmy Swaggart rest solidly on their dispensationalist credentials.

Several reasons dictate concern about the prevalence of the dispensationalist end-times narrative. The centrality of Israel, and particularly the rebuilding of the Temple, to this belief system has profoundly affected U.S. Middle East policy. Uncritical American support for Israel’s expansion of

West Bank settlement and its apparent abandonment of a two-state solution can be traced directly to the advocacy of evangelicals, so-called Christian Zionists, who now exert far more influence than Jewish Zionists. Indeed, the opening and closing benedictions at the May 2018 dedication of the new U.S. Embassy in Jerusalem were given by two dispensationalist ministers. One of them, Robert Jeffress, once claimed that Hitler had helped plan the Jew's return to Israel; and the other, John Hagee, had deemed Hurricane Katrina God's punishment for New Orleans's sinfulness.¹³

Even a mild degree of fatalism about the inevitability of Armageddon in the nuclear age is dangerous. A 2010 Pew Foundation poll found that more than a third of Americans believe that Jesus will return in their lifetime, and most of those believe in the Rapture.¹⁴ One such American was Ronald Reagan, who could discourse knowledgably about dispensational theology with the likes of Jerry Falwell. In the same vein, evangelicals, most of whom are dispensationalists, make up nearly a quarter of the U.S. military; their influence is particularly prominent at the Air Force Academy, whose service branch operates most of the U.S. nuclear arsenal.¹⁵ In 1964, when Daniel Ellsberg and his boss at RAND, who had both just audited the U.S. nuclear chain of command, screened *Dr. Strangelove*, a movie about a psychotic SAC general fixated on the fluoridation of drinking water—an obsession shared even today by a few dispensationalists—who triggers the Third World War, they remarked that the film could well have been a documentary.¹⁶

Throughout history, Christians have labeled Jews as the Antichrist, the very concept of which is explosive. Even today, for a few extremist evangelicals, applying that label to someone, or to any group, justifies their murder.

Finally, dispensationalism alone can and does occasionally trigger mass death, as occurred in 1993 at Waco, Texas, when the Branch Davidian sect, led by the Book of Revelation–obsessed David Koresh, collided with federal officials with no understanding of his belief system.

Given that the roots of apocalypticism are found in both the New and Old Testaments, and likely have earlier roots in Fertile Crescent polytheism, it is not surprising that the doomsday scripts of both extremist Israeli Jews and the Islamic State have more than a passing resemblance to that of Christian dispensationalists, differing only in who plays the heroes and who plays the heavies. Today's Muslim apocalypticists almost uniformly

consider Jews to be the Antichrist, and the remarkable ability of the Islamic State to attract recruits from around the world to the killing fields of Syria and Iraq rested in no small part on an end-times narrative drawn directly from the hadith, the sayings of Muhammad.

If we are to comprehend how social epidemics such as financial bubbles and violent end-times apocalyptic manias originate and propagate, it is equally instructive to understand those circumstances in which they do not occur. Our modern understanding of how crowds can at times behave wisely began in the fall of 1906, when the pioneering polymath (and cousin of Charles Darwin) Francis Galton attended the annual West of England Fat Stock and Poultry Exhibition in Plymouth. There, he performed an experiment in which a large group of people acted with surprising rationality. Approximately eight hundred participants purchased tickets for an ox-weighing contest at sixpence each, with prizes awarded for the most accurate guesses of the weight of the dressed animal, that is, minus its head and internal organs. Amazingly, the median guess, 1,207 pounds, was less than one percent off the actual weight, 1,198 pounds. The *average* estimate was 1,197 pounds; Galton did not report this nearly dead-on number in his first *Nature* article because he felt that the median value, the one exactly in the middle of the estimates, was more theoretically appealing than the more accurate average.¹⁷

Galton's conclusion about the accuracy of collective wisdom has since been repeatedly confirmed.¹⁸ More recently, *New Yorker* writer James Surowiecki summarized this concept in his bestseller *The Wisdom of Crowds*, in which he laid out three requirements for effective crowd wisdom: independent individual analysis, diversity of individual experience and expertise, and an effective method for individuals to aggregate their opinions.¹⁹

So what qualifies, for our purposes, as a "crowd"—the wise ones of Francis Galton and James Surowiecki, or the unwise ones of Luc Jouret, Joseph Di Mambro, and David Koresh?

What separates delusional crowds from wise ones is the extent of their members' interactions with each other. It's doubtful that all, or even most, of Galton's eight hundred contestants ever physically gathered into a single group. A key, and usually overlooked, feature of his experiment

is that it involved the *dressed* weight of the ox. Contestants had to fill out an entry card with their address so that the winners could be notified, and since the result would not become known until the ox was later butchered, this would have discouraged the contestants from congregating before completing their card.

A few years ago finance professional Joel Greenblatt performed a clever variation on the Galton experiment with a class of Harlem school-children, to whom he showed a jar that contained 1,776 jelly beans. Once again, the average of their guesses, when submitted in silence on index cards, was remarkably accurate: 1,771 jelly beans. Greenblatt then had each student verbalize their guesses, which destroyed the accuracy of their aggregate judgment—the new, “open” estimates averaged out to just 850 jelly beans.²⁰

Thus, the more a group interacts, the more it behaves like a real crowd, and the less accurate its assessments become. Occasionally, crowd interaction becomes so intense that madness results. As put most succinctly by Friedrich Nietzsche, “Madness is rare in the individual—but with groups, parties, peoples, and ages it is the rule.”²¹ Mackay also recognized this; perhaps the most famous line in *Extraordinary Popular Delusions* is “Men, it is said, think in herds; it will be seen that they go mad in herds, while they only recover their senses more slowly, and one by one.”²²

Accordingly, the accuracy of a group’s aggregate judgment rests on the participants *not* behaving like a crowd. It also, as Surowiecki points out, depends upon the diversity of the group; the more points of view a group brings to bear on an estimate, the more accurate that estimate is liable to be.

Diversity of opinion also benefits the individual as well; as put by F. Scott Fitzgerald, “The test of a first-rate intelligence is the ability to hold two opposing ideas in mind at the same time and still retain the ability to function.”²³ Over the past three decades, psychologist Philip Tetlock has examined the forecasting accuracy of hundreds of well-regarded experts; he found that those who took into account a wide variety of often contradictory viewpoints performed better than those who viewed the world through a single theoretical lens.²⁴ In plain English: beware the ideologue and the true believer, whether in politics, in religion, or in finance.

While Surowiecki’s book on crowds describes how group decisions can succeed, mine will describe how they can fail, and what happens when

they do. In the most extreme cases, not only do crowds go mad, but as occurred several times in the twentieth century, entire nations do so as well.

Mackay didn't get everything right, nor was his compilation even original; he may have derived inspiration, or even more, from a volume published four years prior by one Richard Davenport, *Sketches of Imposture, Deception, and Credulity*, which covered many of the same areas, although not in nearly as much detail.²⁵ And while Mackay's lurid description of the tulipmania, for example, introduced the term into the modern lexicon, it also earned the scorn of modern observers, who point out that it was hardly the society-wide phenomenon he described.²⁶

Further, Mackay's chapter, subject, and chronological organization is chaotic; chapters on crowd behavior (e.g., financial bubbles, the Crusades) are interspersed with ones on fads (hair length, beards, and duels) and health and scientific dead ends (magnetization, alchemy).²⁷

That said, Mackay's errors, disorganization, and possible lack of originality pale before the fact that he realized, as well as any observer of that era might have, just how often our social nature interferes with our rationality.

I first read *Extraordinary Popular Delusions* more than a quarter century ago, and while the financial manias described in the first three chapters fascinated me, I thought them irrelevant to the relatively well-behaved capital markets of the early 1990s. I was wrong: over the next several years, as the dot-com bubble progressed, Mackay's descriptions of financial madness came to life before my amazed eyes.

Two decades later, the Islamic State and its predecessors proved so remarkably adept at proselytizing believers around the world that they attracted thousands from safe, prosperous Western countries to the killing fields of Iraq and Syria. They did so, in large part, by peddling an end-times narrative remarkably similar to that believed by large numbers of Christians, a subject also dealt with in some detail by Mackay.

As someone who was already greatly influenced by *Extraordinary Popular Delusions*, the rise of the Islamic State rang a loud and clear bell. If ever there was a modern manifestation of a religious mania, this was it; the time was ripe to examine the history of mass delusions, from the

medieval period to the present day, through the prism of the remarkable recent advances in the neurosciences.

I chose to ignore several types of episodes covered in great detail by Mackay, especially fashion and health crazes. Some readers may also wonder why, in today's fraught and polarized political atmosphere, I also chose not to explicitly cover political episodes. In order to keep the title to a manageable length, and because of the personal resonance of financial and religious mass manias, I confined this book to those two areas. The reader will, however, encounter no great difficulty connecting the episodes described in the coming pages, as well as their underlying psychology, to manias of all types, particularly to the totalitarianism of the last century and the viral conspiracy theories of this one.

Easily the most important geopolitical event of the new century was the 9/11 attacks on the Twin Towers and Pentagon, a catastrophe that amplified an already well-established modern Islamic apocalypticism re-awakened by Western political and cultural dominance and the 1979 Soviet invasion of Afghanistan. Arguably the most important transformation in American cultural and political life in the last century was the rise of evangelical Protestantism, which presents profound risks for American policy in the Middle East and for the command and control of strategic weapons. The rise of both Muslim fundamentalism and Protestant evangelicism can be easily understood in the context of prior religious manias.

In more general terms, this book will provide a psychological framework for understanding just why humanity occasionally suffers from mass manias of all types. Manifestly, man is the ape that imitates, tells stories, seeks status, morally condemns others, and yearns for the good old days, all of which guarantee a human future studded with religious and financial mass manias.

Anyone who writes about mass delusions quickly bumps up against a highly inconvenient sociological fact. Like Darius's Greeks and Callataie, every single one of us is a creature of our societal norms, and occasionally one society's sacrament is another's desecration. Many, if not most, of the world's theologies, for example, tend to view the others' belief systems as heretical, even among closely related sects. *Especially* among closely related sects—Freud's famous “narcissism of small differences.” As the

old joke goes, a delusion shared by hundreds of people is called a “cult,” whereas one shared by millions is called a “religion.”

A significant number of Americans believe in the literal truth of the Book of Revelation: that the world will suffer, sooner rather than later, a world-ending cataclysm. While less fundamentalist Christians and non-Christians might consider that end-times narrative delusional, such institutional delusions are only rarely acutely harmful to either their believers or to the rest of the world. Quite the contrary, in fact—all successful societies depend to a certain degree on shared delusions. Whatever American society’s flaws, our greatest strength is our belief in the rule of law and equality under the law; likewise, our economy functions reasonably well because almost all of us believe that money made of paper and of even more ethereal electronic transactions represent real assets and obligations. But at base, such beneficial common beliefs are not much more than society-wide con games: they’re true only so long as most people believe in them—the so-called Tinker Bell Principle. I’ve chosen, thus, to focus on mass delusions that go bad: “Extraordinarily Harmful Mass Delusions and the Madness of Crowds,” if you will.

The stories flow in approximate chronological order, starting with medieval end-times manias not covered by Mackay and ending with the most spectacular recent example of the same phenomenon—the rise of the Islamic State in the Middle East. In between, the steady stream of financial and religious manias over the past several centuries appear in the order in which they occurred, along with the relevant neuroscience.

Our journey into the dark heart of human mass delusions begins in medieval Europe, where an obscure Cistercian monk, inspired by the Bible’s apocalyptic books, developed a theology that sparked a series of grisly Protestant end-times revolts.