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Introduction

"Save Your Soul, Turn Back Now," proclaimed a protest sign at the entrance of the pop-up vaccination clinic at Dodger Stadium in Los Angeles on January 30, 2021. Almost one year into the Covid-19 pandemic that had caused more than twenty-five million cases and 430,000 deaths in the United States to date, vaccines were finally available.[1] And yet, a sudden protest briefly shut down the site. Cars idled as thousands of people waited in a line that snaked through a massive parking lot and into the street. Aerial footage of the traffic jam enraged national onlookers who had been clamoring for a vaccine since the pandemic began. After a few hours, police officers broke up the protest, and the clinic resumed. The slowdown at Dodger Stadium was not the only vaccine protest. One-third of American adults were either against or hesitant about being vaccinated.[2] Many feared the vaccine was dangerous, and some called the pandemic a government-sponsored hoax. The national reception to the Covid-19 vaccines epitomized American political, religious, and cultural divisions in 2021. While some praised the vaccine as a miracle of science and a sign of hope, others denounced it as a soul-altering biological weapon.

Why were vaccines, widely considered one of the most successful and extraordinary biomedical advancements in modern history,

so controversial? How could a technology capable of preventing millions of deaths elicit fear and disgust? Many witnesses to this clash saw it as a historical anomaly—a frustrating result of a past decade rife with political polarization. Since the presidential election of Donald Trump in 2016, mainstream cultural commentators had bemoaned what they saw as a widespread loss of confidence in traditional authority structures, including the government, the biomedical establishment, scientific institutions, and academia.[3] Critics attributed opposition to vaccines to the "death of expertise," widespread online misinformation, and fervent anti-science attitudes.[4] They lambasted those who relied on self-validating intuitions and unverified information from alternative authority figures, including controversial politicians, cable television hosts, and conspiracy theorists. According to each side of the Covid-19 vaccine debate, there were powerful actors duping millions of their fellow Americans into disputing clear evidence and hurting their bodies. They disagreed on what amounted to evidence and bodily harm, however. Many witnesses to this clash over public health argued that opposing vaccines was a new phenomenon borne out of digital echo chambers.

In fact, the seeds of this reaction were planted hundreds of years earlier. Controversy over vaccination programs runs deep in American history, dating back to the first inoculations against smallpox in eighteenth-century colonial Massachusetts.[5] Then and now, public discussions about the safety of a specific vaccine and broad debates concerning the biological and social demands of mandatory vaccinations were about more than a specific disease or a two-sided war over science. Health experts and journalists labeled those who were unenthusiastic about vaccination as "anti-vaxxers."[6] These same experts and commentators lobbed sexist critiques at vaccine-skeptical mothers who they stereotyped as dumb, irrational, and noncompliant. They argued that widespread scientific ignorance caused vaccine refusal and that those in doubt needed to know more about the medical efficacy of vaccines. Yet, more information made no difference. Providing vaccine doubters with scientific facts proving the safety and effectiveness of vaccines did not change people's minds.[7] If this was not about knowing science, what was it about?

This book joins those of other scholars who sought to understand the cultures of "anti-vaxxing" without assuming they emerged from ignorance. Their work produced a more nuanced framework that distinguished between "vaccine hesitancy," which is an "attitude of ambivalence toward vaccines," and "vaccine refusal," which is the behavior of abstaining from a vaccination.[8] Vaccine hesitancy also included "skepticism" of vaccines or scientific expertise.[9] These scholars from the humanities and social sciences noted that most people who held misgivings about vaccination did not actually refuse to vaccinate their children. Yet, media coverage of anti-vaxxers gave that impression. Further, a subset of vaccine opponents felt more threatened by public health policies that mandated or compelled vaccination than by vaccines as medical tools. Some scholars concluded that vaccine controversies were better understood as proxies for anxieties about "justice and values" that were spread by "rumors," not examples of disbelief in science.[10]

This book offers a stronger portrait of what justice and values vaccine-hesitant people have sought to achieve.[11] It asserts that vaccine hesitancy stemmed from critical perspectives on authority. Rather than see vaccine hesitancy as simply oppositional to science, I argue that hesitancy represented diverse claims about where knowledge derives, who is most in charge, and what really matters. Understanding the practice and power of vaccine hesitancy requires understanding religion.

What follows is a religious history of vaccine hesitancy in which vaccine debates are contextualized as responses to larger social concerns, traumatic histories, and moral commitments. Through this analytical framework, I examine how varied groups utilized religious beliefs and practices to express reasons for vaccine hesitancy and to coalesce a diverse countercultural movement that questioned the safety of vaccines and fought against compulsory tactics for vaccination. I argue that religion provided the cultural tools that powered the modern vaccine-hesitancy movement, which grew from a targeted vaccine safety initiative in the 1980s into a mainstream conservative political position during the Covid-19 pandemic.

Thinking with Religion

This book utilizes an inclusive conception of religion that covers not only what religious institutions, doctrines, and official leaders say, but also how people live, create meaning, and answer existential questions. It includes what everyday people do with religious ideas, beliefs, and practices. In other words, it emphasizes individuals' thoughts and actions rather than institutional history or traditional dogma. This approach allows me to draw broader historical and cultural conclusions about how people use language and concepts that derive from religious contexts to describe or relate to things that seem secular or nonreligious.[12] Throughout, I will call attention to when traditional or explicit religion was at play. An example of this occurred when some Roman Catholics opposed HPV vaccination during the early 2000s by appealing to Catholic beliefs and practices surrounding sexual purity and morality. This contrasts with nontraditional or implicit religiosity, which this book highlights as a fundamental driver of vaccine-hesitant history. I will also note when people used the category of religion or the term "religious" to classify certain behaviors or beliefs as deserving of legal protection.

Religions are cultural systems and narratives that are created—and re-created—by everyday people.[13] They are heterogeneous and adaptable to different contexts. This book argues that religions provide adherents with ways to live correctly by enacting certain beliefs and practices. In some religious traditions, people desire to act according to how God wants, whereas in others they strive to maximize their alignment or openness to a spiritual realm. Deference to the divine or metaphysical is not a requisite of religion. Some religious systems, such as Confucianism, Daoism, and alternative spirituality, are oriented toward flourishing in the natural and social world. Religion is a word to describe how people establish and practice truths they perceive about the world. Religions support people living out these truths, offering guidance on authority, personal responsibility, the physical body, health, parenting, sexuality, gender, social roles, and behaviors.

We use religious practices to express, embody, or act on our beliefs. One of the most important religious practices is storytelling according to set patterns that amplify a proper moral outcome. For example, an individual may speak or write a conversion narrative to convey their positive personal transformation. Similarly, mythmaking is religious storytelling that is ritually retold to help certain groups make sense of their place in the world. Ancient myths described the relationship between humans and superhuman forces. Modern myths also decipher invisible structures of power. Myths are often told instructively within marginalized groups to anticipate or prepare for insults of inequality.

We also practice religion when we delineate between pure and impure substances, thoughts, or behaviors.[14] This is because it is only possible to classify or distinguish pure from impure if there is already a moral code in which some objects, ideas, or actions are considered good, clean, and honorable while others are bad, unclean, and derelict. Applying the standards of purity to everyday life requires monitoring what we put into our bodies, how we care for them daily and over the lifespan, and what actions are beneficial or detrimental. Often, people conduct rituals to reestablish purity when they have been contaminated, either physically or metaphorically. Most contemporary religious systems are porous, meaning that people inhabit multiple systems or have knowledge of others. Individuals bend and break rules or creatively extend them into new arenas, from secular spaces to the digital world.

Characterizing vaccine-hesitant attitudes and actions as religious beliefs and practices is a new approach to the study of vaccine hesitancy in American culture. This book contributes to two significant areas of research. First, it offers a reformulation of vaccine-hesitancy history that identifies vaccine debates as contests over moral authority waged using the tools of religion. Second, this book defines religion broadly to conceptualize how and why certain individuals and activist groups understood the stakes of vaccinating themselves or their children as particularly meaningful or pivotal. Healing and sickness are subjects that medicine and religion equally engage. By showing how religion, health, and medicine interrelate, I hope to

reorient public and medical discussions about vaccine hesitancy to build mutual trust and consideration.

Religion and Vaccine Hesitancy

None of the world's major religious traditions prohibit vaccination. In fact, most religious leaders encourage vaccination against vaccine-preventable diseases because it saves lives.[15] When it comes to religion and vaccines, the media often ask religious leaders questions such as "What does Islam say about vaccination?" or "What does the Pope think about vaccines containing cells derived from aborted human fetuses?" These questions do not help us get at the root causes of vaccine hesitancy because they falsely assume that traditions are static or that religious leaders routinely dictate the actions of all adherents. After all, religious people do not always follow the doctrines, scriptures, or the recommendations of their leaders, just as patients do not consistently follow their doctors' orders.

Notably, the government has classified vaccine refusal as religious since the 1960s and 1970s. During this time, every state adopted the Centers for Disease Control and Prevention's (CDC) recommended immunization schedule as a requirement for school attendance. Nearly all passed a statute legalizing the right for people to obtain exemptions from mandatory vaccinations for reasons that were not directly related to a medical condition. They classified these "nonmedical exemptions" as stemming either from "religious" or "personal" beliefs. In effect, describing one's reason for refusing a vaccine as religious was nearly the only way to legally abstain from mandatory vaccinations.

In this application, the category of "religion" wielded classificatory and constructive power. It classified by setting apart some beliefs as religious from what was apparently secular, or nonreligious. It constructed by establishing criteria and laws to protect that which was designated as religious. This is because religious freedom is guaranteed by the First Amendment. Vaccine refusal was legal insofar as it met state-based criteria to be considered religious. This was true, except in states that did not permit religious or personal

belief exemptions. For many decades, Mississippi and West Virginia were the only holdouts on religious exemption allowances. Beginning in 2015, the right to receive a religious exemption from mandatory vaccination became a hotly contested issue in many state capitals. Politicization of nonmedical exemptions and rising vaccine hesitancy nationwide caused rapid shifts in state laws.[16]

This book asserts that vaccine hesitancy in the United States arose when people perceived that vaccination may violate their religious beliefs, practices, or rights. As a result, activists expressed reticence or opposition to vaccination using the tools and logics that belong to the realm of religion. This should not be surprising. The United States has always been a religious country. People practice varied traditions, cultivate beliefs in the divine, and treat certain areas of life as sacred. Public discourses are religious, too. They are worn through with predominantly Protestant Christian symbols and metaphors that speak volumes beyond the most quotable examples of "in God we trust" and "one nation under God." American electoral politics are driven by contests over how to apply religious values to public policy, how to protect religious minorities, and how much to delineate between secular and sacred spaces.

This is true for health care and the practice or use of medicine too. We see this most clearly when it comes to hot-button issues, including abortion rights or vaccine hesitancy. These issues most confound the liberal, progressive, and scholarly crowds who are irked when religion "encroaches" into the scientific arena. They feel that there should be a separation between health care and religion. This is because, throughout most of the twentieth century, science did serve as a common ground where diverse factions met and spoke the same language, even as they disputed religion and politics. In large part, Americans held scientists and doctors in high esteem, and the scientific framework appeared unbiased, apolitical, secular, and trustworthy. In the early twenty-first century, public trust in scientists fell. Many Americans questioned whether scientists were unbiased or apolitical. At the same time, facts about vaccines ceased to be common ground, and vaccine hesitancy increased across the population.[17]

Vaccine hesitancy and refusal were never monolithic. They comprised many impulses, orientations, and identities that changed over time. What remained constant was that vaccine-hesitant people brought their traditional and nontraditional religious selves into decisions about vaccination. Their religious and cultural contexts informed how they regarded and interacted with scientific knowledge production, biomedical technologies and ethics, and the moralities of bodily care. The main concerns that vaccine-hesitant people expressed over decades were rooted in moral questions regarding how to use biomedical knowledge and innovations to preserve the sacredness of individual or family bodies.

Historically, very few people exercised their right to refuse vaccination, so religious exemptions were largely ignored in public conversation. This changed in the late 2010s. Members of a few explicitly religious groups, including ultra-Orthodox Jews and evangelical Christians, adopted vaccine hesitancy as a moral commitment. These communities were prone to oppositional positions toward the government, and when vaccine-hesitant activists made overtures to members of these groups their vaccine-hesitant messages resonated. In other words, some religious groups that felt alienated from mainstream culture and institutions at this time eagerly accepted vaccine hesitancy because it was able to blend seamlessly into their own religious worldviews. It only took a small increase in vaccine refusals and requests for religious exemptions for measles, a highly contagious disease, to erupt in pockets around the country. The media seized on these outbreaks with frenzied coverage.[18] With new scrutiny, some state legislators moved to repeal religious and philosophical exemptions. Repeals were passed in California, Maine, and New York.[19]

Backlash to these decisions caused vaccine-hesitant people to find common cause with religious liberty activists who were typically conservative White Christians contesting culture war issues related to sex and gender identity.[20] Successfully, they argued that opposition to vaccination required legal religious liberty protections and that these protections were imperiled. This strategy aligned with the values of Donald Trump's first presidential campaign in 2016

and the Make America Great Again (MAGA) movement. When the Covid-19 pandemic hit, the movements that touted vaccine hesitancy were, paradoxically, more centered in reifying White conservative Christian identity politics through coalition-building than in adopting the subtle or nontraditional religious beliefs and practices that had driven vaccine hesitancy over the prior fifty years. Nevertheless, official battles over Covid-19 vaccines were waged through the legal processes that protected religious freedom, just as they typically had been.[21]

Health officials, and many liberals, reacted to these challenges by lobbing contradictory insults at vaccine-hesitant people. Vaccine supporters doubted the sincerity and religious bona fides of vaccine refusers, arguing that refusers were dishonest about their beliefs and could not be trusted. At the same time, they accused vaccine-hesitant people of practicing their own religions incorrectly and using religion as a shield to assert medically dangerous positions.[22] These mischaracterizations encouraged stalwart vaccine refusers and newcomers alike to double down on their distrust of public health leaders during the pandemic. This book offers a corrective to these competing views and strives to increase religious literacy in public discourse and medical education.[23]

Hesitancy and the Herd

Vaccines have been a part of Americans' everyday lives for more than half a century. They mark developmental milestones for children and are recorded in perpetuity in our medical records. Vaccinations are gatekeepers to daycare, schools, camps, and colleges. For adults, they are tied to the weather. Autumn commences "cold and flu season," and we are reminded to get a flu shot. Vaccines are also routine aspects of pediatric, prenatal, and primary care. Yet, they have always been controversial. This is because the use of vaccines has always hinged on the quality of our relationships to state and medical authorities.[24] It is also because they became requirements to access certain educational and employment opportunities. For these reasons, vaccines are both high- and low-stakes medical care.

Doctors view them as low risk, high reward. Patients sometimes disagree depending on their risk tolerance or their personal moral commitments.

Vaccines are both a biomedical technology and a communal endeavor.[25] Vaccines were invented to prevent mass human death and suffering caused by various infectious diseases, including smallpox, diphtheria, whooping cough, polio, and measles. Vaccines have high efficacy rates, but they do not confer immunity to everyone who receives them. In addition, some people cannot take them because of medical complications, or because they are too young to be vaccinated. As a result, for most vaccine-preventable diseases to remain at bay, a critical mass in a community must be vaccinated. Once this critical mass is reached, a community achieves "herd immunity." In this case, enough disease-fighting cells, or antibodies, are built up collectively among community members who inhabit the same spaces, breathe the same air, touch the same surfaces, and encounter the same germs, to prevent mass outbreak of a certain disease. Herd immunity allows even those who cannot (or choose not to) be vaccinated to benefit from the immunity conferred by vaccines.

However, each vaccine presents its own numbers game, and contagious, vaccine-preventable diseases spread quickly if too many people opt out of vaccination. This is why there are state requirements for vaccination. Infants and children carry much of the load in maintaining herd immunity, as vaccines are administered during well visits throughout the first year of life and into childhood. Nearly all children who attend school in the United States are required to provide documentation that they have received mandatory vaccines as a prerequisite for enrollment. Between birth and age eighteen, this requires more than thirty individual injections, most of which are administered before first grade.[26] Sometimes parents avoid vaccination by using alternative schooling. Vaccine laws are state based, which means that some states require homeschooled and privately schooled children to be vaccinated, but most do not. Many vaccine-hesitant people find the tactic of compulsion morally reprehensible and an infringement on God-given parental rights.

By the early 2000s, mass vaccination had successfully minimized many vaccine-preventable diseases in American life. Gone were the days of worrying about paralytic polio, known as "the Crippler," or the fear of new mothers suffering a miscarriage or birth defects due to rubella infection.[27] With public memory of those diseases fading, it was relatively easy to feel that the risk of an adverse effect from a vaccine was far greater than the risk of one's child developing a bygone disease. But to maintain herd immunity, a community needs to vaccinate. This poses a moral and practical dilemma. On the one hand, to vaccinate was to relinquish some personal liberty to authorities and take on a statistically minuscule risk of adverse reaction to oneself or one's child to help the community achieve herd immunity. This reasoning exhibits communitarian moral reasoning. Communitarian logic says that the benefits of safeguarding the community are high enough to justify every individual assuming a very low risk. On the other hand is individualist logic, which says that not vaccinating safeguards the individual, even if it puts the community at risk. From this perspective, individuals make better decisions for themselves than authorities or groups can. Beginning in earnest in the early 1980s, this moral dilemma about the nature of risk animated most vaccine debates, even as they grew out of varied historical and cultural contexts that caused activists to utilize different religious beliefs or practices to justify their hesitancy.[28]

During the early twenty-first century, when vaccine hesitancy increased noticeably, ethicists and public health workers grew concerned about American tendencies toward hyper-individualism. Some viewed vaccine hesitancy as a breach of a social contract.[29] These critics denounced vaccine resisters as "free riders" because they reaped the communal benefits of herd immunity without assuming any risk themselves. Critics also lamented declining communitarian values and doubted people's ability to calculate risk accurately and actionably.[30]

Throughout this book, we will meet many people who came to their vaccine hesitancy by way of traumatic experiences of illness. Others sought to protect themselves from structural racism and misogyny by resisting a vaccine. Some worried that each new

vaccine added to the schedule for mandatory childhood vaccinations was a domino falling toward socialized medicine and the government's control over medical care. Still others debated the ethics of "sacrificing" a few bodies—those who may suffer adverse effects of vaccines—to achieve the mass public health goal of herd immunity. Despite these different concerns, most vaccine-hesitant people bristled at a "one-size-fits-all" approach to vaccination policies dictated by population-based studies rather than an individual's medical predispositions and family histories.[31]

What About the Science?

Most public discussion about vaccine hesitancy has depicted vaccine-hesitant people, typically White middle-class mothers, as "anti-vaxxers" who were "anti-science." Critics derided them for trusting their guts over their doctor's recommendations and for finding evidence on online message boards more compelling than the peer-reviewed articles in the *Journal of American Medical Association*. Yet, as many scholars have shown, vaccine-hesitant people did put stock in science and wanted to use the scientific method to understand biological facts. They trusted the scientific paradigm, but they did not always trust the spokespeople, corporations, and institutions that represented science and medicine to the public.[32]

True to their name, skeptics feared that scientists, doctors, and medical associations were financially incentivized to act immorally. They were particularly wary of public health organizations such as the CDC and the conglomeration of pharmaceutical companies that they called "Big Pharma." In their view, these powerful entities did not have the population's best interests at heart, and they were motivated by profits over people. As a result, they could not be trusted to present scientific evidence accurately. Here they had a point. Consider the Opioid Overdose Epidemic, a crisis that began in 1999, when drug companies assured medical doctors that patients would not become addicted to opioid painkillers despite knowing that those drugs were both overprescribed and addictive. Over 645,000 Americans died of opioid-related overdose between 1999

to 2021, and the crisis continues.[33] Also, we learned that the food, water, beauty care, and consumer products that we once believed were safe for our health leave "forever chemicals" and microplastics inside our bodies, to unknown cumulative effect.[34] Acknowledging facts such as these could have helped add nuance to public conversations about trust in medicine and vaccines. Unfortunately, debates about vaccination grew more simplistic and politically polarized during the twenty-first century.

Too often, liberal elites—academics, Democratic politicians, and celebrities—equated science with fact. They repeated mantras such as: Believe in science. The facts are obvious. Trust the scientists. Each of these proclamations hammered on at least three points of fracture in contemporary American culture. First, that science was something to believe in—a choice, willingly made, with moral implications. Second, that science was the only way, or the correct way, to know something. Third, that to trust scientific facts, such as "vaccines are safe," we must trust the authorities who conveyed them.

Yet, these statements contradicted many of the core characteristics of science.[35] Science comprises a body of knowledge because scientists are trained in the scientific method and their results are subjected to peer review, which builds consensus.[36] Science is not static. "The science" changes. Astronomers once believed that Pluto was the ninth planet to orbit the sun. In 2006, with new empirical findings and much scientific debate, they reached a new consensus. Pluto was classified as a dwarf planet because it did not meet the criteria required to be named a planet.[37]

To nonscientists, changing facts and conceptual shifts can be confounding, infuriating, or discrediting. Nonetheless, facts do accrete and paradigms do shift, as experiments are redone and methods are reworked.[38] Science is historically, culturally, and ethically contingent—the experiments that scientists used decades ago to test certain vaccines, for example, would never meet today's ethical standards, yet millions of deaths worldwide have been prevented because the vaccines that were tested prevented disease effectively.[39] Moreover, science takes us only so far before we are met with moral quandaries. Science gave us the atomic bomb, but it is morality that

tells us whether to drop it or not. In the end, scientists are people, too. Their societies include good actors and bad. Authority figures are never, and should never be, universally accepted.[40]

Many people have been persuaded that we need to reduce carbon emissions. And that they should stop smoking. However, not all people changed their minds or behaviors on account of scientific arguments. Scientific arguments that touted vaccine safety and efficacy did not eliminate vaccine hesitancy, even amid the global Covid-19 pandemic.[41] The point is not that the facts were wrong or unconvincing, but rather that they were not all powerful. Humans reckoned with these facts alongside values. They thought and spoke in many different languages founded on experiences difficult to convey in the terms that science required. These languages were emotional—love, fear, intuition, faith. And they reflected embodied feelings—anxiety, revulsion, guilt, awe. There was no partition to separate these senses from scientific facts or reasoning.

This book analyzes vaccine-hesitant individuals, communities, and movements during different periods in United States history as they reacted to and debated vaccines against whooping cough, measles, human papillomavirus (HPV), influenza (flu), and Covid-19. Throughout, there are high-profile anti-vaccine advocates who operated as prophets and conspiracy theories that functioned as sacred texts. The primary sources for this study are discourses—spoken and written debates—about vaccine ingredients and safety, illness, families, homeschooling, wellness practices, legal protections, and medical freedom. They are housed in parenting guidebooks, documentary films, exposés, blogs, podcasts, illness memoirs, social media posts, newspaper articles, alternative health advice columns, and grassroots organization websites. A closer look at these sources reveals everyday commentaries on health that brim with religious language and concepts, often wrestling with matters of life and death, right and wrong.

These sources touch on many important questions, but perhaps none more important than authority. Who do people trust with their health? And what constitutes authoritative bodily knowledge? As people debated vaccines, they engaged in a proxy war over who

held the power to discern truth—the individual or the collective biomedical establishment. Individual illness narratives and anecdotal evidence gleaned from personal experience often contradicted the scientific facts derived from randomized trials and peer-reviewed studies published in scientific and medical journals.[42]

Readers will meet parents who believe that their child was injured, killed, or made permanently ill because of a vaccine. This book takes people's beliefs about their bodies and illnesses as religious truth-claims. Contextualizing how injury narratives were lived and interpreted is the critical work of telling a religious history of vaccine hesitancy. In emphasizing discourses rather than probabilities, I demonstrate how information about vaccines can be simultaneously sacralized as truth and dismissed as misinformation. Both types of knowledge—the anecdotal and the peer-reviewed—are cited throughout to advance an inclusive narrative that can help each side of the proxy war better understand the other.

A Religious History of Vaccine Hesitancy in the United States

This book tracks contemporary vaccine controversies over the fifty-year period spanning 1982–2022. Moving chronologically, each chapter takes up the national conversation about vaccine safety and mandates through a formative debate of the era. I add religious context and analysis to what, in the past, have been told as secular stories. In all, these stories offer a historical narrative about how vaccine hesitancy in the United States changed over time and why it ballooned in the years surrounding the Covid-19 pandemic.

Chapter 1 explores how vaccine hesitancy during the 1980s was fueled by parents who explained their children's developmental disorders as vaccine injuries. These parents spoke publicly using the genre and style of evangelical Christian conversion narratives, which dominated the airwaves as the Christian Right ascended in American politics and televangelists became popular entertainers and religious storytellers. As many pained voices joined this chorus, these parents adopted new identities: parents of vaccine-injured

children. They told those who would hear that they believed a specific vaccine was dangerous, and they felt compelled to warn others. These stories were not traditionally religious, but they served as prophetic texts warning of existential threats. They fueled the nascent organization Dissatisfied Parents Together, which used scientific and legal mechanisms to rectify what they saw as widespread medical malpractice.[43] They worked within existing institutions, operating as consumer rights advocates dedicated to improving the safety of the diphtheria-pertussis-tetanus (DPT) vaccine.

Chapter 2 discusses why a poorly researched and scientifically disproven theory that mercury in the measles-mumps-rubella (MMR) vaccine caused autism resonated with many middle-class women in the 1990s and early 2000s. Taking their lead from the popular natural health movement, these women found comfort in the explanatory power of "mercury-autism theory." They scrutinized chemicals and toxins in food, air, building materials, and medicines to prevent illness by keeping their children's bodies pure. At the same time, droves of Americans disaffiliated from religious organizations, leaving behind the stability of traditional authority structures. As these bonds fragmented, so did trust in experts of all sorts—in biomedicine, religion, politics, and parenting. The combination of the growth in individualized spirituality and a new parenting paradigm known as "intensive mothering" resulted in a maternalized vaccine skepticism. Vaccine hesitancy thrived in communities that most plainly understood the bonds between mothers and children to be sacred and maternal responsibility to be paramount.

Chapter 3 explores Gardasil, the first vaccine targeting HPV, a sexually transmitted infection. When it was released in 2006, its manufacturer marketed the vaccine directly to adolescent girls as an optional vaccine to prevent cervical cancer. The vaccine-hesitancy movement gained newfound support from evangelical Christians and conservative Catholics. In this case, preserving virginity, a different state of purity, was the topic at hand. Gardasil pushed traditionally religious and politically conservative people who had not historically objected to vaccines to question the morality of this single vaccine. They worried that Gardasil would change their

daughters' sexual behavior. Because these groups were overwhelmingly Republican voters, their activism caused many conservative politicians to disavow their initially positive responses to Gardasil. Later, as the Gardasil demographic grew into young adults, some claimed injury and used a different type of religious narrative to tell their stories. They identified as medical martyrs—young women whose bodies and prospects were destroyed because of their faith in medical progress.

Chapter 4 explores how racial inequities in health care contributed to vaccine hesitancy. In the 2000s, public health researchers found that Black Americans were roughly 10 percent less likely to receive a flu shot than White Americans.[44] This chapter argues that Black Americans used explanatory practices of mythmaking and conspiracy to validate vaccine skepticism grounded in collective and personal experiences of medical racism and trauma. In turn, public health officials sought to counter their hesitancy by working with church leaders to promote vaccination as a religious action. In this case, certain traditional religious institutions sought to sway individual religiosity toward vaccination.

Chapter 5 addresses measles outbreaks in the 2010s. One incident traced to Disneyland brought to light the increasing number of under-vaccinated "hotspots" around the country. Measles outbreaks reflected a significant uptick in the percentage of children who were unvaccinated or under-vaccinated nationwide. At the same time, isolated religious communities, such as the ultra-Orthodox Jewish population of Brooklyn, the Amish in Pennsylvania, and Somali Muslim immigrants in Minnesota, started to experience measles outbreaks. To most outside observers, these enclave outbreaks appeared curiously correlated to religious identity, causing national media to conclude that devout people rejected science. This conclusion stirred up the well-engrained misperception that religion and science are incompatible.

At the same time, organizers in every state activated grassroots anti-vaccination groups, often under the banners of "medical freedom" or "medical liberty," to protect the right to vaccine refusal for children. Homeschooling grew in popularity, in part because of

lax state laws about vaccination for homeschooled children. In the context of Trump's MAGA movement and widespread conspiracy theorizing, Democrats positioned themselves as the "pro-science" and, consequently, the "pro-vaccine" party. Chapter 6 explores how grassroots vaccine activists animated by the threat to religious and personal belief exemption used the outbreaks in religious enclaves as evidence to claim that vaccine choice was a religious right that must be protected. They were joined by prominent and wealthy leaders who shrewdly employed dog-whistle politics designed to appeal to White conservative Christians. Quickly, people's willingness to be vaccinated correlated closely to their political identities, which in turn were highly correlated to religious and racial identities. I argue that threats to the legality of religious and personal belief exemptions resonated with many conservatives and appealed to Trump's voter base during this watershed time.

Against this highly partisan backdrop, it should not be surprising that when the Covid-19 pandemic broke out in the United States in early 2020, Americans immediately divided along politically partisan lines over all public health orders—not only vaccinations. Democrats believed the pandemic was real, that Covid was deadly, and that it required a collective war-effort to fight it. Republicans largely downplayed the dangers of the pandemic and resisted public health measures, such as social distancing and wearing face masks in public. When the first vaccines against Covid-19 arrived in early 2021, many liberal Democrats refreshed their browsers constantly to schedule vaccine appointments, waited for hours to receive their shots, and boasted about being vaccinated.[45]

Conversely, vaccination rates among Republicans were slow and low. Among the reasons for this was the spread of misinformation about the safety and biological mechanisms of the vaccines, the mass perception that manufacturers were malfeasant, and perceived threats to religious and medical liberty. Most striking was that the Covid-19 vaccine skeptics were largely new to the vaccine-hesitancy cause. Many were brash and angry, flouting public health rules implemented to prevent Covid-19 transmission. They embraced and spread conspiracy theories that disparaged vaccines. These theories

fed existing panic among conservative White Christians about their own diminishing cultural influence by implicating the new vaccines as agents of a state-sponsored biological campaign to cause infertility among unwitting populations.

These concerns were articulated and fought as religious liberty issues. White evangelical Christians devoted to Trump proclaimed that mandating the Covid-19 vaccine violated their religious liberty even though most had never expressed concerns about other mandatory vaccines. Discussions of what was sacred and profane, pure, and polluted were far less prevalent. Chapter 7 argues that Covid-19-era vaccine-hesitant discourses revolved around White Christian identity politics and efforts to survive in a demographically changing country.

This book provides a historical narrative that focuses on religion to fill the gaps left by prior accounts of vaccine hesitancy in the United States. Understanding the practices and beliefs surrounding vaccine hesitancy as expressions of religion elucidates how valuable concepts such as embodied intuition, the sacrality of motherhood and childhood, medical martyrdom, and tainted bodies are to the story of vaccination and vaccine refusal. It also clarifies what it means to mark motherhood and childhood as sacred. Explaining how categories become differently empowered is something a religious history provides. With nuanced perspective, we also gain insight into how Americans use religion to interrogate critical issues in the mainstream of scientific and medical knowledge.

The aim of the chapters that follow is to tell a new story that is attentive to the ways that religion has shaped vaccine hesitancy. A prime mover of this story is the conviction that reading history through this lens helps us see each other more clearly and completely. It is insufficient for us to react to the complexity surrounding vaccine hesitancy with reductive slogans that promote our beliefs and caricature those who do not agree with them. We must attune to how religion influences our individual and collective instincts,

morals, and actions—especially in situations where people interact with proclaimed authorities. Knowing about these influences should be beneficial to physicians, nurses, public health workers, lawmakers, and anyone deciding whether to vaccinate themselves or their children. I hope this narrative will aid our collective efforts to overcome both disease and distrust.

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