Chapter 3
The Dog That Didn’t Bark

Historians have a favorite Sherlock Holmes story. In the well-known tale “The Adventure of Silver Blaze,” Arthur Conan Doyle has his famous detective solve an apparent horse theft with a key clue: a guard dog that did not bark. We won’t give away the details of the mystery, but for historians, the lesson is clear. Often, the most important piece of information is the clue that isn’t there.

In the case of the continuing struggle over evolution education in the twentieth century, the dog that didn’t bark was the long period between roughly 1930 and 1960 in which the issue disappeared from the nation’s headlines. However, people hadn’t stopped caring about it. Nor had evolution opponents—despite the fond wishes of evolution supporters—agreed that they had lost the fight in the public controversies of the 1920s. Rather, the issue did not surface in public controversies largely because both sides concluded that they had won. Both sides had plenty of evidence to support their belief. Evolution supporters noted breathtaking scientific advances, including a new consensus among mainstream scientists about the ways natural selection worked. Opponents took solace from the fact that their local schools and textbooks didn’t teach much evolutionary theory.

It was only in the early 1960s that this deluded truce was breached. In the Sputnik-fueled drive for improved science education, the federal government backed a series of textbooks that challenged the timid policies of commercial publishers. These textbooks, the Biological Sciences Curriculum Study, made evolution one of their central themes. As the books and their reputation spread, a new wave of opposition to evolution education emerged. Also in the early 1960s, two US Supreme Court decisions forced many evolution
opponents to reconsider their relationship with public schooling. Although the decisions didn’t deal specifically with the issue of evolution education, the court’s rulings in the cases of prayer and Bible reading in the schools had an enormous impact among conservative Christians, often the same activists who led opposition to evolution education.

In the 1930s, mainstream scientists made advances in their understanding of genetics that helped solve a long-standing dispute over the mechanism of evolution. Earlier scientists, including Charles Darwin himself, had operated on the premise that offspring blended the characteristics of their parents. This presented a few problems for the theory of natural selection, especially the likelihood that any advantageous mutation would quickly become swamped by interbreeding with parents who didn’t share that mutation. It seemed impossible that any new mutation would persist. For this and other reasons, as we have seen, mainstream scientists in the 1920s often spoke of the end of Darwinism.

The answer eventually came by a circuitous route from some pea plants. In the nineteenth century, Gregor Mendel’s studies of these plants hadn’t attracted immediate attention from the scientific community. By the turn of the twentieth century, however, a new generation of scientists, Hugo de Vries in particular, recognized that Mendelian genetics could solve some of the problems with the mechanism of natural selection. By the 1930s, scientists such as Ronald A. Fisher, J. B. S. Haldane, and Sewall Wright forged a new synthesis of Darwin’s idea of natural selection with Mendelian genetics.

Throughout the 1930s, mainstream scientists such as George Gaylord Simpson and G. Ledyard Stebbins worked, in the words of historian Edward Larson, to “institutionalize their approach to the study of evolution within the mainstream scientific community.” In the decades that followed, leading scientists Theodosius Dobzhansky, Ernst Mayr, and E. B. (Henry) Ford were among those who cemented the supremacy of this explanation of evolutionary mechanisms and its unchallenged dominance in professional scientific institutions and publications.

By the late 1950s, mainstream scientists had become confident in what they called the neo-Darwinian or modern evolutionary synthesis. Advantageous mutations could be passed along through natural selection, with recessive genetic traits surfacing relatively quickly when they bestowed an evolutionary advantage. The details of evolution still offered plenty of room for scientific research, debate, and disagreement, but the basic story of life-forms developing from earlier forms based on advantageous mutations had become
established as a fundamental truth of biology. No mainstream scientist still argued that life on earth, even human life, had been created by fiat.

By the 1960s, mainstream scientists were more confident than ever that evolution explained the origins of life. In the words of Simpson, whose paleontological research had contributed a great deal toward establishing the modern evolutionary synthesis, “Organic evolution is one of the basic facts and characteristics of the objective world.” However, just as Edwin Conklin had realized a generation before, Simpson recognized that this scientific consensus didn’t carry much weight outside its own professional circles. Following in Conklin’s footsteps, he hoped to carry his evolutionary message to that wider audience. For decades, beginning in the 1940s, Simpson tried to cure the general public of its false belief in a world not created by evolution. He recognized that Darwin’s theory, even in its modern synthesis, had reached “alas!—only a minority of us.”

Part of the reason for this broad gulf between mainstream scientific opinion and that of the majority of the populace was the fact that the public controversies over evolution education in the 1920s had largely scared educators and publishers away from the issue. As John Scopes noted glumly in his memoirs, even forty years after the Scopes trial he would probably still be punished if he tried to teach evolution. Teachers in Dayton, Tennessee, still had to sign pledges that they would not teach the subject. Even “in the Space Age,” the older Scopes lamented, evolution opponents kept the theory far from their children’s classrooms. Simpson agreed. Despite it being the 1960s, he complained, “innumerable students still leave high school without ever having heard of evolution, or with having heard of it only in such a way as to leave them unimpressed or antagonistic.”

Generalizations about what has been taught in America’s classrooms are notoriously inexact. The localized nature of school decisions in the United States makes it difficult for historians to assert with any great confidence what was and what was not taught in classrooms in the past. Individual school districts can and do impose policies that differ from those a few towns over. And individual teachers have a great deal of control in what they actually teach. In short, it is very hard for historians to get behind those classroom doors. If they worried that their choices might be controversial, teachers wouldn’t be likely to publicize their decisions. There may have been a great deal more evolutionary education going on in the 1930s, ’40s, and ’50s than is evident in the historical record. However, despite those important caveats, it seems that Simpson’s and Scopes’s impressions were correct. Just as mainstream
scientists achieved successes in reconciling Mendelian genetics with Darwinian selection, and in establishing that evolutionary synthesis as a basic building block of mainstream science, so evolution opponents had largely been able to keep those ideas out of America’s secondary science classrooms.

Historians of religion have argued that after the public controversies over evolution education in the 1920s, many conservative Protestant evangelicals retreated in humiliation from public activism to build their own institutions. Some did. As we will explore below, many more evolution opponents simply felt that they no longer needed to protest against evolutionary education. Often, their local schools gave them good reason for this complacency. Most historians have agreed that one of the most serious casualties of the Scopes trial was the treatment of evolution in school textbooks. After Scopes, the story usually goes, mainstream textbooks scrubbed out any mention of evolution. There is much truth to this telling, but as historian Adam Shapiro has recently argued, the actual process was much more convoluted. Textbook authors often fought—and often successfully—to keep basic evolutionary content the same in post-Scopes revisions. But sales agents with an eye on the bottom line pushed hard to purge their product of any poisonous content that might attract controversy and discourage sales. In the end, textbooks often reflected this cacophony of interests. Many successful science textbooks changed wording and cleaned indexes to eliminate controversial terms such as evolution and Darwin. But many of those same books kept most of their evolutionary content. Busy book watchdogs seemed satisfied to check indexes and scan text superficially. In one case, Shapiro found, a post-Scopes textbook that contained very little evolutionary content became controversial only because its editors had forgotten to eliminate the term evolution from an attached glossary. Parents worried about evolution might with justification feel confident that their children’s textbooks had been purged of evolution, even if that purge had actually been superficial.

During this lull in public controversy over evolution education, those who had retreated to new independent institutions helped create a new anti-evolution infrastructure. Just as mainstream scientists in the 1930s, ’40s, and ’50s established the dominance of the modern evolutionary synthesis at leading research universities and in scientific professional organizations, so these new anti-evolution institutions established a new consensus among evolution opponents during that same period. Thus, by the time that public controversies over evolution education broke out again in the 1960s, evolution’s opponents had changed just as much as its supporters had.
One important type of new institution was the Protestant fundamentalist college or seminary. The mission of these schools wasn’t limited to the issue of evolution, but their growth and influence had an enormous impact on the development of anti-evolution sentiment during the decades following the 1920s controversies. Many of them trained a generation of students in an explicitly anti-evolution worldview. They provided homes for intellectuals who opposed evolution and evolutionary education. They trained pastors in a theology that insisted on steadfast opposition to evolution education. And they allowed students and families to continue their education and their pursuit of professional careers without accepting the scientific consensus about evolution that had come to dominate mainstream higher education.

An example of such a school was Bryan College in Dayton, Tennessee. As its name and location suggest, its founders wanted a memorial to William Jennings Bryan and his heroic stand at the Scopes trial. The details of the new college’s theology and location caused some debate among leading 1920s evolution opponents. Nevertheless, all its early supporters agreed with its first president, George Guille, who insisted it would become “internationally known for its belief in the Bible as the inspired Word of God and for its devotion to the Lord Jesus Christ.” Bryan College’s founders inscribed those beliefs in a creed, to which students, faculty, administration, and staff had to agree. One tenet was that the new school would teach only the creation story as recorded in the book of Genesis.

Other new anti-evolution colleges and universities in the 1920s insisted on similar creeds. One of the most influential, Bob Jones University, opened in 1926 with one that could “never be amended, modified, altered, or changed.” Among its provisions were the notions that the school was dedicated to “combating all atheistic, agnostic, pagan and so-called scientific adulterations of the Gospel” and to teaching “the creation of man by the direct act of God.”

These new colleges and universities were joined by some older schools that signed on to an explicitly anti-evolution theology. Gordon College in the Boston area, the Bible Institute of Los Angeles (later Biola University), Wheaton College in suburban Chicago, and the Moody Bible Institute of Chicago were among those contributing to the new network of institutions of higher learning. The scope and influence of this new network are hard to judge. Just as mainstream scientists disagreed about the details of evolution, so anti-evolution institutions have had sharp disagreements about theology, science, and political strategy. But the network of anti-evolution colleges and universities has certainly grown into a significant alternative presence in the
field of American higher education. One indicator of their success has been the large numbers of adults with college degrees who have not accepted the mainstream scientific consensus about evolution. Polls have shown that just over a quarter of college graduates think humans were created by God at some point in the last ten thousand years.\(^{22}\) Of course, students at secular colleges may also refuse to accept evolutionary theory, but the network of colleges and universities that have dedicated themselves to opposing evolutionary theory since the controversies of the 1920s have made it easier for American adults to be educated without being encouraged to accept the evolutionary ideas of mainstream scientists.

Beyond higher education, another outgrowth of the 1920s evolution education controversies was a new set of alternative scientific organizations. George McCready Price, the self-described geologist whom Clarence Darrow mercilessly ridiculed in absentia at the Scopes trial, briefly continued in that decade to contend with mainstream scientists to delegitimize evolutionary theory. In a debate in London just after the trial, for example, Price mocked “the specialist in some corner of science” who continued to explore the field of evolution. Such pseudoscientists, in his opinion, were “living in a fool’s paradise.” Due to Price’s research, the foolish evolutionist would “wake up some fine morning and find that he needs an introduction to the modern scientific world.”\(^{23}\)

To his dismay, the London audience heckled Price viciously. Their furious shouting and relentless stamping ultimately kept him from completing his rebuttal. He never debated in public again.\(^{24}\) But that didn’t mean he retired from his anti-evolution activism. Price continued writing and publishing prolifically. He also helped found a new organization, the Deluge Geology Society (DGS). He realized after the public tumult of the 1920s that mainstream science had turned irresistibly in favor of evolution. In order to continue his fight, he would need his own organization.\(^{25}\)

The long-term impact of the DGS was enormous. In addition to attracting immediate support from a small but energetic group of dedicated evolution opponents, it provided inspiration and an institutional home for the next generation of anti-evolution activists. Henry Morris, a civil engineer by training and a passionate opponent of evolution education, joined the DGS as he was beginning his career in anti-evolution activism. He adopted co-founder Price’s fairly radical positions, including the notion of a young earth and of a literal worldwide flood. Those notions had been uncommon among anti-evolutionists of the 1920s.\(^{26}\) However, Price’s involvement in providing an alternative scientific institution helped establish “flood geology” as the new orthodoxy among evolution opponents.
In 1961, just as George Gaylord Simpson confidently told audiences that evolution had been established as one of “the basic facts and characteristics of the objective world,” just as the Biological Sciences Curriculum Study produced its first set of evolution-heavy school textbooks funded by $10 million in taxpayer money, Henry Morris and John Whitcomb Jr. published their landmark work, *The Genesis Flood.* This text brought the ideas of flood geology to a new generation of evolution opponents, a generation that often felt as if its hard-won victories over evolution education had come under renewed attack. Just as evolution proponents had created a new consensus about the likely process of natural selection, so evolution opponents achieved a new religious consensus. For significant portions of the conservative Christian population, sincere religious belief came to require belief in creation by divine fiat only a few thousand years in the past.

In the decades that preceded those 1960s controversies, however, many evolution opponents concluded that they had won their battles to rid their schools of evolutionary theory. In addition to the five states—Oklahoma, Florida, Tennessee, Mississippi, and Arkansas—that had passed anti-evolution laws or resolutions, several other state boards of education demanded that evolutionary material be deleted from their textbooks, including California, North Carolina, Texas, and Louisiana.

Publishers didn’t hesitate to accommodate their demands. Such states not only represented enormous textbook markets, they also served as a market bellwether for other school textbook purchasers. The 1926 edition of George William Hunter’s *Civic Biology*—the older edition of which became the center of the Scopes trial—eliminated the word *evolution* from much of the text and index. For example, a paragraph bearing the heading “Evolution of Man” in the 1914 edition was now preceded instead by “Development of Man.” Similarly, an index entry for “Darwin and Natural Selection” was revised as “Darwin, Charles, on heredity and variation.” Henry Holt made similar changes to Truman Moon’s *Biology for Beginners*. A special edition for use in Texas schools cut three chapters that discussed the “Descent of Man.” Those chapters were left in the edition sent to other states, but even there, Moon made other changes. The 1921 preface declared that biology was “based on the fundamental idea of evolution.” In 1926, the editors changed this to “based on the fundamental idea of development.”

The book that one study has called “the most widely used text in the years following the Scopes trial” did not need as many alterations. For the 1929 edition of Smallwood, Reveley, and Bailey’s *New General Biology*, the book’s already scant treatment of evolution was shortened, and the term was removed.
from its index. In fact, that reticence to pay much attention to the topic in the first place was one of the main reasons for the book’s popularity. In the words of Charles E. Bacon, its publisher’s representative, the Texas State Text Book Commission approved *New General Biology* because it had been “‘tactfully’ written and required no alterations.”

Such market-conscious modifications continued throughout the 1930s, '40s, and '50s. In most cases, textbook authors and publishers changed content to remove controversial terms such as *evolution* and *Darwin*. They preferred to treat the subject briefly and blandly. For instance, of fifteen textbooks commonly adopted by state boards of education in the 1930s, fourteen briefly discussed the idea of human evolution. But they generally used euphemisms to describe it, such as “the early history of man upon the earth.” In the 1940s, popular textbooks increased their inclusion of evolution somewhat. Of fifteen such books, only three included the actual word *evolution* in the text, index, or glossary.

In the 1950s, coverage decreased in some cases. For example, Ella T. Smith’s 1938 edition of *Exploring Biology* informed readers, “Evolution is a fact. Plants and animals do change and have been changing.” In this edition, she also told readers that for humans, too, “the fossil evidence is conclusive that man himself did not appear suddenly on the earth in his present form, but has gradually developed from a much more primitive species.” In the 1954 edition of this book, however, Smith gave a more nuanced description. She noted that evidence “leads scientists to the conclusion that the plants and animals of today are the changed descendants of the plants and animals of the past.” There was another word to describe that change: “That word is *evolution*.” But Smith tended to use the word *change* instead. When she described “the modern point of view,” for instance, she gave a bland description of evolution: “Biologists agree today that plants and animals have changed in the past, and continue to change.” By the 1959 edition, numerous references to evolution in the index had been reduced to one line. In the text, Smith informed readers only that “the history of living things is a long one. Much of it is still unknown.” Moreover, a ten-page section on the history of evolutionary theory that was in the 1954 edition was eliminated entirely. In its place, Smith offered a brief suggestion that students write a report about evolutionary theorists such as Darwin, Alfred Russel Wallace, Lamarck, or Hugo de Vries.

Despite this “tactful” silence on the part of educational publishers and authors, some teachers and some school districts still may have provided a more thorough evolution education. It is impossible to judge with certainty what was taught merely from what appeared in leading textbooks. Nevertheless,
the awkward, tentative treatment of evolution in major textbooks between 1926 and 1960 demonstrates publishers’ sensitivity to market demands. Their bland, brief inclusion of evolutionary ideas allowed them to tell state and district boards of education that their books did not promote evolution.

A few intrepid academics attempted to gauge the depth of evolution education during these decades of relative quiet. None of their studies was quite thorough enough, to be sure, but taken together they convey an impression of deafening silence about evolution in a majority of America’s classrooms. One ambitious nationwide survey in 1942 considered 3,186 responses given by secondary-school biology teachers to a lengthy questionnaire. The survey authors concluded that evolution was taught in “notably less than half of the high schools of the United States.” And of those schools in which evolution was being taught, the authors concluded that usually it was “frequently diluted beyond recognition,” either by pairing it with the teaching of special creation, or by separating human origins from the idea of evolution.

Some of the reasons teachers gave for avoiding the topic are illuminating. Approximately 8 percent (73 of 916 respondents to this question) incorrectly believed that their state had banned evolution education. Others cited instructions from their local board of education or school-building administration, their perception of the will of the majority of their community, or their personal beliefs. The wide variety of reasons given beyond these categories doesn’t tell us much in terms of raw numbers, but it demonstrates that the intensity of feeling about evolution education was a nationwide phenomenon. One respondent from Upstate New York claimed to teach evolution, noting, “I’ve had fights but haven’t lost yet.” A teacher from North Carolina stated that evolution education was a “taboo subject to most people.” Other teachers echoed the response of one from rural Nebraska, who said he or she avoided evolution education mainly due to “lack of time.” And one California teacher added, “Controversial subjects are dynamite to teachers.” Given the scope of this survey, it is not surprising that teachers revealed a wide variety of experiences with evolution education.

Other studies were less ambitious. In 1950, a Newark, New Jersey, high-school science teacher and a Rutgers University–Newark faculty member teamed up to investigate what they called “the meager, evasive, and equivocal discussion” of evolution in high-school biology textbooks. Their survey of Newark teachers and textbooks confirmed their suspicions. The biology textbooks available to science teachers in that city often left out the words Darwin and evolution entirely. One informed readers that plants and animals “were not created at one time.” As the authors of the study noted, the lingering
insistence on using the verb create “may make for sound doctrinaire theology, [but] it is certainly not biology.”52 Other available textbooks, notably Smith’s Exploring Biology (1943 edition), included a more thorough treatment of the idea of evolution. Even so, roughly one-third of the survey respondents (eight of twenty-nine) claimed to make no mention of evolution in their classroom teaching. And of the teachers who did claim to teach evolution, they taught on average merely a fraction of the days recommended for the subject by the city’s standard science curriculum—six days instead of ten.53

Neither the Newark nor the nationwide study could make comprehensive claims about the amount of evolutionary education going on across the country. But they do suggest that teachers and textbooks tended to downplay evolution education.

One additional piece of evidence suggesting the lack of evolution education during this period was “the dog that didn’t bark” alluded to at the beginning of this chapter. Between 1930 and the 1960s, no public controversies over evolution education gained national attention. This wasn’t because evolution opponents had retreated from any public battles over schooling. To the contrary, when issues such as weekday religious education attracted their attention, conservative Christians became very active in educational politics in the 1930s, ’40s, and ’50s.54

Scattered evidence of local controversies also suggests that evolution opponents continued to keep a wary eye on local and state education policy. In 1937, the state superintendent of schools in Indiana responded to public pressure by insisting, “The theory of evolution should not be advocated, and frankly I doubt if it is advocated in any school in Indiana.”55 That same year, public-school officials in Philadelphia responded to anti-evolution pressure by denying that human evolution was being taught in that city’s public schools.56 Evolution opponents certainly maintained a reputation for contentiousness that made these school officials squirm.

Although we can’t be certain, evolution opponents likely did not challenge the teaching in their local schools more often because they felt that there was not much evolution education to challenge. Perhaps paleontologist George Gaylord Simpson hit the nail on the head when he lamented in 1961, “Although almost everyone has heard of [evolution], most Americans have only the scantest and most distorted idea of its real nature and significance.”57

In 1957, the successful launch of the Soviet Union’s Sputnik satellite spurred a renewed interest in American science education. The federal government poured millions of dollars into the development of a new series of science textbooks, the Biological Sciences Curriculum Study (BSCS).58 Due to
such funding, the editors of the series were free to ignore the market consider-
ations that had so intimidated commercial publishers.59 As a result, they made
evolution one of the new textbooks’ nine central themes.60 By the late 1960s, 
nearly half of American high schools were using BSCS materials to some ex-
tent.61 Just as important, commercial publishers rushed to update and deepen 
their own treatment of evolution to keep up with that series.62

The BSCS textbooks forced evolution supporters and opponents to notice 
each other again. After decades of relative quiet, evolution opponents could
not help but notice the way mainstream science had hardened its position
in support of the theory of evolution through natural selection. In the 1920s,
anti-evolution activists confidently told audiences that mainstream scientists
would come around shortly. Opponents assumed they soon would recognize
that their dabblings in evolutionary theory were not leading them anywhere.63
But by the 1960s, anti-evolutionists could no longer maintain such fond
hopes. The publication of the BSCS textbooks reinforced their fears that
mainstream science had been permanently and thoroughly taken over by evo-
lutionary theory.

However, the BSCS textbooks weren’t the only change that affected the
reemergence of public controversies over evolution education. Other events
had a significant impact on how evolution opponents felt about public educa-
tion, in ways that most histories of evolution education have not adequately
recognized. Two of the most important were a pair of US Supreme Court de-
cisions. In the 1962 Engel v. Vitale case, the court decided that a nonsectar-
ian prayer composed by the New York State Board of Regents could not be
used in public schools.64 In 1963, in School District of Abington Township v.
Schempp, the court made an even more profound statement about religion in
public schools. It ruled that Bible reading and use of the Lord’s Prayer, even
when students were excused with parental permission, unacceptably breached
the wall of separation between church and state. Before the 1963 decision, only
ten states had passed laws against Bible reading in public schools.65 The deci-
sion reflected a new understanding of the proper constitutional relationship
between religion and government. As justice Tom C. Clark wrote in his ma-
ajority opinion, any legislation must have a “secular legislative purpose and a
primary effect that neither advances nor inhibits religion.”66 This was a higher
hurdle for evolution opponents, and one that led to their increasing claims of
scientific merit for the curricula they proposed.

Not all evolution opponents were conservative evangelical Protestants. Nor
were all evangelicals opposed to the teaching of evolutionary theory. Neverthe-
less, opposition to evolution education, along with support for Bible reading
and vocal prayer in the classroom, remained central educational policy positions for many American evangelicals. The Supreme Court decisions of 1962 and 1963 left many evolution opponents in agreement with the editors of the leading evangelical magazine Christianity Today. In the aftermath of the Schempp and Engel decisions, those editors quickly moved from a celebration of prayer in the public schools as the inviolable demand of America’s “devout masses” to a defensive exhortation that evangelicals formed only a “believing remnant” in American culture. Evolution opponents often agreed that they could no longer simply demand that evolution be prohibited from public schools. No longer could they insist, as they had in the public controversies of the 1920s, that schools ban evolutionary theory.

In order to understand the public controversies over evolution education that surged back onto the nation’s headlines in the 1960s, it is vital to understand the changing attitudes that caused this resurgence. Just as the new series of BSCS textbooks convinced many evolution opponents that mainstream science and science education had gone irretrievably to the side of evolutionary theory, so the Supreme Court decisions of the early 1960s forced them to acknowledge that their potential to influence public education had changed dramatically. Changing ideas about science, theology, and culture would play a decisive role in the new round of controversy over evolution education.

Yet such ideas didn’t spring to life the instant the BSCS textbooks entered the nation’s classrooms. Rather, they were a long, slow, quiet development that neither evolution opponents nor supporters ordinarily recognized at the time. They were the dogs that didn’t bark. During the 1930s, ‘40s, and ‘50s, both sides of the evolution issue consolidated their hold over their respective institutions. Meanwhile, due to educators’ and publishers’ worry about provoking controversy, the actual teaching of evolutionary theory remained hit-or-miss in the public schools. As mainstream scientists worked out the kinks in the theory of evolution through natural selection, so anti-evolution scientists embraced a theory of origins that insisted on a young earth and a recent, catastrophic worldwide flood. By the time the BSCS textbooks brought public attention back to the issue of evolution education, both sides had established themselves as durable, internally coherent belief systems with extensive political support and strong institutional structures. But the new round of public controversies would put both sides to the test.