

# Why evolution need not be true

A review of  
*Why Evolution is True*  
by Jerry A. Coyne  
Viking Penguin, New York,  
2009

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Compared with other works of this type, Coyne's book puts much emphasis on biogeography and on peculiar adaptations of certain living things. In this review, I analyze the evolutionary arguments and do not generally attempt to present creationist alternatives, of which there are many, and almost none of which are even mentioned by Coyne.

In fact, Coyne's understanding of the creationist position is absolutely pathetic. He actually believes that, were the Earth created several thousand years ago, Africa and South America would only be a few inches apart (p. 17). Obviously, he hasn't a clue about all of the much-publicized creationist development of catastrophic plate tectonics. He knocks down a straw-man of the creationist position many times, as by suggesting that living things occur exactly in the same locations where they were created (p. 92, 101, 108). To him, creationists deny speciation (p. 183)—a naïveté doubly inexcusable in light of all the volume of creationist research in baraminology of recent decades. Coyne cannot even get the duration of the Noachian Deluge correct (to him, six weeks! p. 89), and he chooses to repeat long-disproved canards, such as the Ark-inadequately-small and the Ark-released-carnivores-eliminate-herbivores.<sup>1</sup>

We hear the usual complaint about too many people not believing in evolution. Could it be that people

realize that there must be something wrong with evolution since it needs nonstop bombastic propagandizing along with open disrespect towards those who disagree?

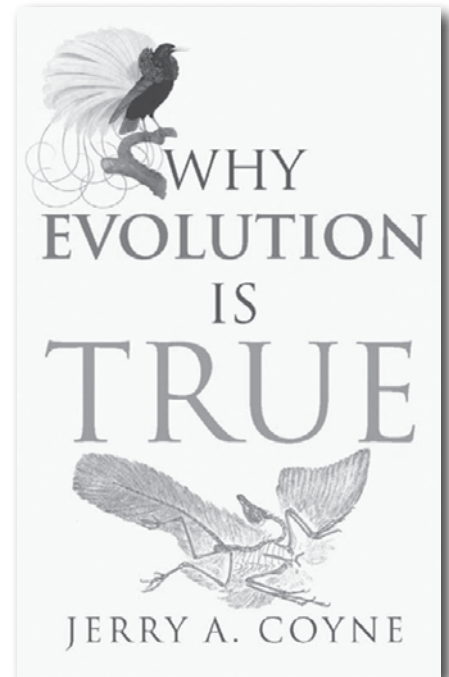
Predictably, Coyne parrots all the standard anticreationist arguments that can be found in virtually every book of this type. For instance, he brings up the vitamin-C pseudogene (pp. 67–69), even though it does not require an evolutionary explanation.<sup>2</sup> He trots out the myth of 98.5% human-chimp DNA identity (p. 195). Antibiotic resistance is supposed to prove evolution (pp. 4, 130), and macroevolution is explicitly claimed to be nothing more than microevolution given more time (p. 236).

Finally, Coyne repeats Dobzhansky's dictum: "Nothing in biology makes sense except in the light of evolution." This self-serving nonsense is refuted by the long history of achievements in the biological sciences that predated the Darwinian revolution.

Throughout this book, Coyne pontificates on what a Creator would not do. Incredibly, he asserts that a Creator would never make organisms that have convergent adaptations (p. 92). Consider man the creator. He uses convergent structures all the time as part of his designs. Caterpillar treads are convergent in military vehicles (tanks) and earthmoving equipment (caterpillar tractors). The conveyor belt is convergent in "organisms" as dissimilar to each other as escalators, bucket dredges, and chain saws.

### **Coral bands, Earth's rotation, and isotopic age-dating methods**

One novelty of this book is Coyne's resurrection of the claimed agreement, based on a cited 1963 study, between coral growth bands and the inferred



400-day Devonian year (pp. 24–25). He is not telling the full story. More recent studies<sup>3</sup> include those that cast doubts on the reliability of such methods. There are problems with such things as the placement of band boundaries according to unconscious self-fulfilling preconceptions, the lack of bands grown during stressful years, marine life whose bands are not periodic in the first place, uniformitarian assumptions about the paleoenvironments from which the sampled fossil organisms had been taken, the "reinforcement syndrome" or "consensus" effect caused by the tendency to publish studies that seem to confirm previous ones, and still other problems that could be mentioned.

### **Origin-of-life copout**

Coyne asserts that the unexplained origin of life is no problem for evolution because it is not part of evolutionary theory (p. 236). How convenient! In actuality, had the first cell arose by non-design means, it must have been the culmination of a long series of steps from more primitive life-forms and still-earlier quasi-life forms. If this is not evolution, then what is? Also, most biology textbooks have a

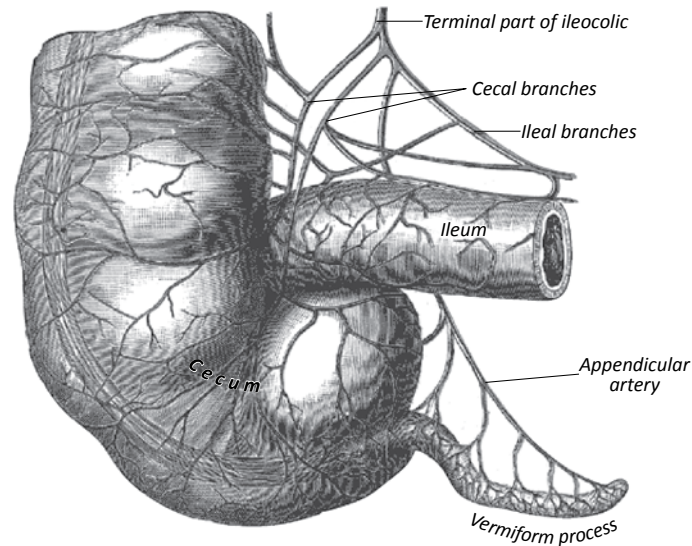
section on the origin of first life from non-living chemicals, a hypothesis often called “chemical evolution”. Perhaps Coyne needs to inform *Scientific American*, since one issue was entirely devoted to evolution, and it included a detailed article entitled, “Chemical Evolution and the Origin of Life”.<sup>4</sup>

### Transitional forms—stratigraphically as needed?

Coyne insists that transitional forms not only exist, but also occur right where they are predicted to be in a stratigraphic sense. His argument is disingenuous in several ways. To begin with, “correct age” is quite elastic. Prospective transitions are often mentioned as being “too early” or “too late” to be on even the direct general path of ancestry towards a particular group. Nor are potential “transitions” necessarily limited to the “correct” Phanerozoic interval. As an extreme example, consider those fish which are capable of ambling on land. They occur not only in the Devonian, where they are “needed” as transitions leading to the first tetrapods, but also in many other parts of the Phanerozoic fossil record. In fact, they exist today.

Evolutionists are prone to enlist whatever fossils they find at the “correct” stratigraphic interval and proclaim them as transitions. One has only to read a paleontology book of 50 years ago and compare it with one of today. Furthermore, once-proclaimed “transitions” can be discarded entirely. Think of all of those much-publicized “missing links” in human evolution that have met this fate.

Owing to the fact that reconstruction of evolutionary pathways among fossil organisms is an ongoing post hoc process, evolutionists can always change their story. Imagine what would happen if the earliest tetrapods,



**Figure 1.** The appendix. More and more evidence dispels the evolutionary notion of it being a vestigial organ. Also, appendicitis turns out to be primarily a disease of modern civilization, not presumed evolutionary heritage.

instead of in the Devonian, were unexpectedly discovered much earlier—in the Ordovician. Evolutionists would largely forget all about those much-ballyhooed Devonian “fishibians”, and recruit and then proclaim some Cambrian fish as the “correct-age” transition leading to these newfound first tetrapods.<sup>5</sup>

Cladistic methodology itself encourages loose, *ad hoc* definitions of “transitional forms”. Evolutionists have “moved the goalposts”, adopting a weaker definition of “transitional form.” Ancestor-descendant relationships are now eschewed in favor of “degree or relatedness”. Variegated mosaic forms are passed off as transitions. All this not only means that quite-unlike forms can be pigeonholed into a chain of “transitions”, but also that morphological traits that don’t fit consistently in sequence can be labeled “convergences”. Finally, traits that don’t fit at all can be dismissed on an *ad hoc* basis as “specializations”.

### Birds to reptiles: not quite so rosy

Let us first consider the long-revered *Archaeopteryx*. Describing the situation before the mid-1990s, Coyne writes:

“After the discovery of *Archaeopteryx*, no other reptile-bird intermediates were found for many years, leaving a gaping hole between modern birds and their ancestors” (p. 40). Without intending to, Coyne has just repeated and validated the oft-ridiculed “gap-filler now means two gaps” thinking that has at times been exhibited by creationists. And, regardless of what *Archaeopteryx* was, it is now understood to have little relevance. Dececchi and Larsson<sup>6</sup> recently commented:

“Here we show that the origin of birds is associated with little or no evolutionary change

to the skeletal anatomy of the forelimb, and thus *Archaeopteryx* is unlikely to be the ‘Rosetta Stone’ for the origin of flight as it was once believed to be.”

As to all those recent “bird-reptile” finds, Coyne (pp. 39–47) has a rosy view of the gradational appearance of birdlike traits. He glosses over all the trait appearances and disappearances, discontinuities, and many other evidences that the cladistic “progression” is an artificial one.<sup>7</sup> A more recent study<sup>8</sup> shows that the following situation exists:

“In summary, rather than being simply a rapid accumulation of changes at or near the origin of Aves, bird flight appears to have been a stepwise series of punctuated evolutionary modifications.”

Translated from *evolspeak* (punctuated changes mean gaps), one realizes that, despite the chain of transitions (loosely defined, as noted earlier), significant discontinuities exist in the chain.

After expounding on the known fossils, Coyne comments: “Despite the unknowns, we can make some guesses about how natural selection fashioned modern birds” (p. 46). Good choice of words!

### Vestigial organs: self-refuting arguments

Instead of defining vestigial organs as functionless ones, Coyne adopts the slippery definition of a vestigial organ as one that has reduced function: "... it no longer performs the function for which it evolved" (p. 58). This begs the question, because one has to *assume* evolution is order to deduce what the "full" function of the organ in question was supposed to be! Also, as shown by Bergman,<sup>9</sup> any concept of "reduced function" is *ad hoc* and inherently indefinable. Should it be an 80% reduction? 50%? 30%?

Coyne manages to hoist himself on his own petard. He suggests that, before the days of modern medicine, 1% of humans died from appendicitis—a death rate which he calls "pretty strong natural selection" (p. 61). As to the obvious question why the appendix (figure 1) has not long ago been eliminated by natural selection, Coyne can only offer *ad hoc* speculations

(p. 62). He imagines that natural selection may not be able to shrink the appendix further without making it even more harmful. Or perhaps modern medicine appeared in history at just the time the human appendix was coincidentally on the verge of disappearance!

Furthermore, recent research—by evolutionists—has shown that it has an important function as a "safehouse" for helpful bacteria, so they can repopulate the intestines after dysentery.<sup>10</sup> Furthermore, it is far from a vestige, as one of the researchers, William Parker, an immunologist at Duke University Medical Center in Durham, N.C., points out, "70 percent of all primate and rodent groups contain species with an appendix".<sup>11</sup> He further pointed out:

"... appendicitis, or a potentially deadly inflammation of the appendix, is not due to a faulty appendix, but rather to cultural changes associated with industrialized society and improved

sanitation. Those changes left our immune systems with too little work and too much time their hands—a recipe for trouble."<sup>11</sup>

And while affirming his belief in Darwin's idea of evolution as a whole, Parker said:

"... If Darwin had been aware of the species that have an appendix attached to a large cecum, and if he had known about the widespread nature of the appendix, he probably would not have thought of the appendix as a vestige of evolution."<sup>11</sup>

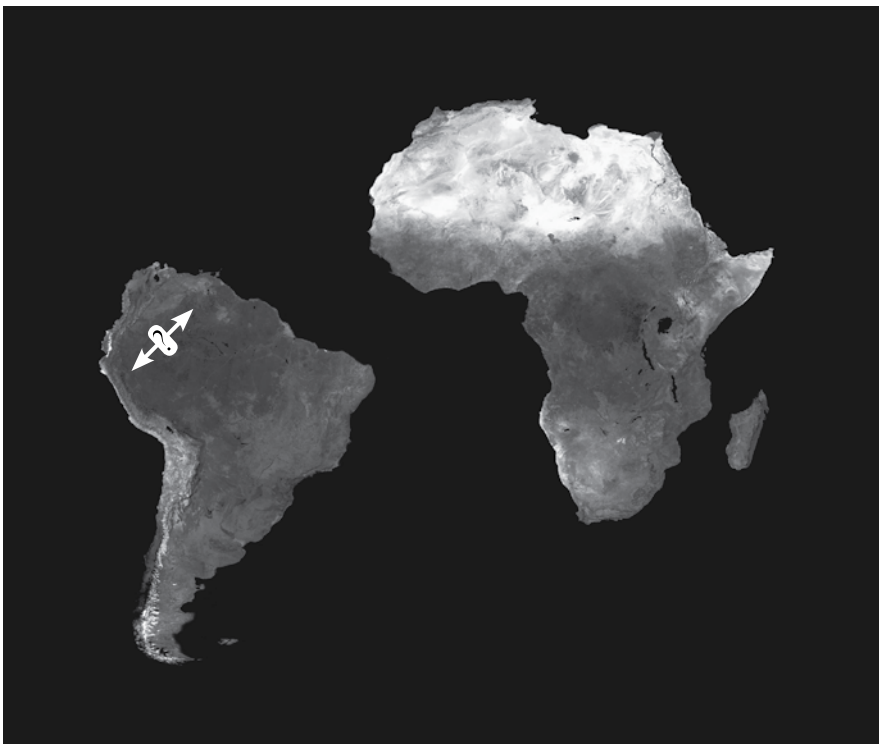
### Natural-selection explain-alls

Coyne tells us that male lions kill the cubs sired by previous males because such behavior ended up favoring the promulgation of the killer's genes (and thereby the killing behavior itself) to future generations (pp. 121–122). What about all the non-killing species (as humans)? Evolutionists would probably respond that the human female would not accept a male who killed her offspring. Or perhaps the male unintentionally chooses a female whose pre-existing offspring happen to carry genes that are similar to his own (making the included care, or at least tolerance, of these offspring a behavior that got favored by natural selection). Evolutionary imagination is infinitely malleable!

### Biogeography of desert-adapted plants

Consistent with his emphasized premise that only evolution explains biogeography, Coyne cites the fact that, in North and South America, the desert-adapted succulents all belong to the cactus family, while the desert-adapted succulents of Asian, African, and Australian deserts all belong to the euphorb family (p. 91). Modern-day deliberate introductions are successful, proving that the biogeographic disjunction couldn't be the result of continent-specific adaptations.

To begin with, Coyne is wrong. There is in fact a member of Cactaceae,



**Figure 2.** Paleobiogeographic and biogeographic distributions of life do not straightforwardly fit evolutionary predictions. Land bridges or other overwater dispersal mechanisms, for example, must be invoked for shared African/South-American biotas that, according to evolutionary dating methods, postdate the separation of the two continents.

*Rhipsalis*, native to Africa, Madagascar, and Sri Lanka.<sup>12</sup> Evolutionists have disagreed as to the explanation. Should they suppose that it had predated the Gondwana breakup (figure 2), or should they suppose that its seeds had been secondarily introduced by ocean-crossing birds?

The foregoing consideration should be expanded to other life-forms that are shared by Africa and South America. Some of these couldn't have predated the split of these two continents, so evolutionists have supposed that they had either crossed the south Atlantic, or had migrated indirectly across a northerly Laurasian route.<sup>13</sup> In fact, biogeographical sharing/nonsharing of faunas among the two continents can always be explained *ad hoc* by the openings and closings of the Laurasian route.<sup>14</sup> So much for the wondrous predictive powers of evolutionary theory!

The modern-day interchangeability of introduced euphorbs and cacti on the continents may be illusory. Selection pressures favoring one over the other may become apparent only over longer periods of time, or may have operated in the past but no longer in the present.

Finally, let us suppose that the desert-adapted succulents worldwide were limited to the cactus family. Would evolutionists be dismayed? No! They would change their story, saying that the cactus family managed to spread worldwide, forcing the extinction of all competitor desert-adapted succulents (or that it preoccupied the desert-adapted niches, preventing the emergence of desert-adapted euphorbs in the first place).

### Biogeography in perspective

Not surprisingly, Coyne emphasizes biogeographical oddities. Let's keep them in perspective: The families of most land animals, at least, are fairly well distributed over the continents.<sup>15</sup> Many factors, and especially historical contingencies, had governed biogeographical

distributions in the past. Were history to be replayed, marsupials may be distributed worldwide, the Australian mammalian fauna may be similar to that of Asia, and North America may be the continent that has a distinctive group of mammals, say cats, found nowhere else in the world. On still another replay of history, no continent might have a distinctive mammalian fauna.

We triumphantly hear about the distribution of the *Glossopteris* flora (pp. 98–99). What Coyne forgets is that the distribution of this flora was deemed reconcilable with static, permanent continents when the latter had been the ruling paradigm.

Going further, Coyne alleges that the faunal-floral distinctiveness of isolated land masses is directly proportional to their age, and hails this as a prediction of evolutionary theory (p. 109). Not so fast. One only has to recount all of the *ad hoc* land bridges that had been invented in the past to cope with nonconforming evidence. Long after continental drift had been accepted, land bridges (or other “massaging” of data) still continue to be invoked, as in the case of the paleobiogeography of dinosaurs.<sup>16</sup> Now consider the celebrated example of Madagascar. Although separated from continental Africa for ostensibly at least 120 million years, it has much younger (50–26 million year) terrestrial mammalian groups that have a similar ancestral lineage to those on continental Africa.<sup>17</sup> Since no evidence of a submerged land bridge has been found, swimming/rafting of mammals across Mozambique Channel has been invoked to explain away these discrepancies. Predictive evolutionary theory indeed!

We also hear about evolutionary theory being the only one capable of explaining the unusual plants and animals found on many islands. In fact, life-forms found on small Pacific Islands can be readily explained in a young-earth creationist context.<sup>13</sup>

### ID: “God of gaps”, or legitimacy of inadequate naturalistic explanations?

Typical of evolutionists, Coyne insists that a Designer is an unscientific concept, and that it is nothing more than an escape from a lack of understanding of natural processes (p. 137). Let us examine the latter premise.

Commonly-cited examples of design reasoning, such as the watch on the beach, are really too obvious and overpowering to make the point. Consider, instead, something more subtle—certain spherical forms of gold.<sup>18</sup> Some of these microspherules are formed by a designer (man). Others are the unassisted products of nature. While some interesting oddities in gold alloys have been found in nature, the presence of certain alloy admixtures is thought to be diagnostic of anthropogenic origin, as unassisted natural processes are unlikely to duplicate them. Clearly, then, the inadequacy of naturalistic explanations DOES count as a legitimate argument for a designer. So why not use it consistently?

### “Bad design” ... here we go again

Predictably, Coyne would have us believe that “bad design” (as he and other evolutionists define it) could only imply that the Designer intentionally made things to look as if they had evolved. Oh really? Let's examine the mechanical spray painter and observe its profligate dispersion of paint. Should we conclude that the paint-wasting sprayer is “bad design” or “jury-rigging” unworthy of any designer? Or should we realize that it is better design to waste inexpensive paint than to waste expensive painter labor?

Going further, Coyne cites various human maladies (such as complications in human childbirth caused by large-headed human infants needing to move through the pelvis) as evidence for the “jury-rigging” process of evolution. Would not alternative designs (such as

women giving childbirth through an opening in their abdomen) cause other problems? Finally, using Coyne's logic, should we insist that automobiles and other machines (which, BTW, are very simple compared with living things) couldn't possibly have been the products of a designer because they occasionally malfunction?

Let's keep this entire red-herring issue in perspective. "Bad design" arguments only confuse the issue, which is not the (opined) quality of the design, but the *origin* of the design.

### Does circuitous design equal bad design?

Coyne would have us believe that the long, roundabout laryngeal nerve in our chests is a leftover of our fish ancestry, and one that no intelligent designer would make. Says who? Human-designed machines and structures are full of such things as circuitous wiring and plumbing, but that hardly means that they are not the products of intelligent design.

Now let us consider situations in which a circuitous route is actually harmful to its bearer. The automobile with its engine in front requires a long, tortuous exhaust system perched underneath the car. This clearly makes it more vulnerable to injury from obstructions than the short exhaust system of engine-in-back cars (I speak from personal experience). Following Coyne's logic, should we suppose that engine-in-front cars are not the products of intelligent design? No. We realize that there is an engineering trade-off between the advantages of the car with its front-situated engine and the concomitant disadvantage of its more easily-damaged long, circuitous exhaust system.

### More "bad design" just-so evolutionary stories

Let us examine another "bad design" argument more closely—the human testicles. Coyne points out that human sperm requires relatively cool temperatures. Males are ostensibly

stuck with the preexisting fish-ancestry body-build that now requires the embryonic testicles to migrate down the inguinal canals to outside the body, a process which eventually leads to weak spots that can develop into hernias (p. 13). By his own admission, Coyne cannot explain why evolution favored the placement of testicles in an easily-injured position, and the fact that some mammals (e.g. the platypus and elephant) do just fine with internal testicles (p. 235). The heat-intolerance of sperm may be secondary—a consequence, not cause, of the externally-situated human testicles (p. 236). Obviously, the "whats", let alone the "whys", of this subject are not well understood. If nothing else, external testicles are a problem for evolutionists.

### The atheism and nihilism of evolution

To his credit, Coyne tacitly admits the meaningless of the universe as an implication of evolution, but then insists that we can create our own meaning and marvel at the intricacies of nature, as Einstein did. "Enlightened religion", as Coyne calls it, can accommodate evolution. But why settle for a meaningless universe when, contrary to his claims, the evidence doesn't require acceptance of evolution? And why marvel at nature without giving credit to the One who made it?

Coyne tries to get around the humans-are-savages implications of evolution by pointing to societal advancements, such as the virtually-universal rejection of the mortal gladiatorial combat of Roman times. His view resembles the humans-are-getting-better-and-better thinking of the 19<sup>th</sup> century, which was largely discredited by the events of the successive one. Also, such things as the infanticide (abortion) prevalent in the most "advanced" nations make one question how much we have advanced since the times of the Romans.

### Conclusions

Having now reviewed several books written by evolutionists, I am struck by their monotonic similarity to each other in many respects. There is almost always only a superficial understanding of creationism and ID, and very little original thinking among evolutionists. It is impossible to escape the conclusion that leading evolutionists are more interested in disparaging creationism and ID than they are in understanding it.

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## The Christian Nazi myth refuted

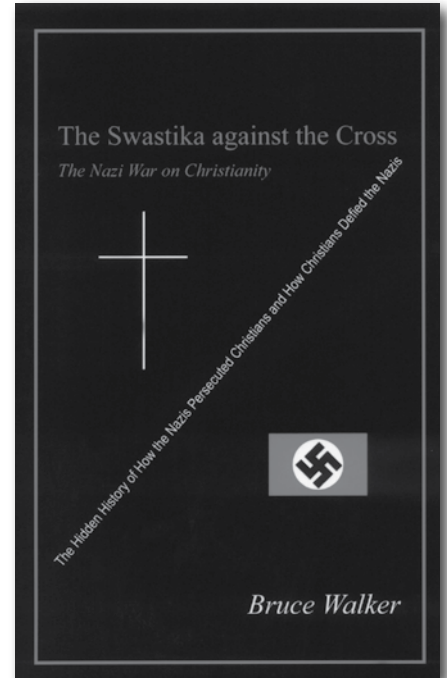
A review of  
*The Swastika against the Cross: The Nazi War on Christianity*  
by Bruce Walker  
Outskirts Press, Parker,  
CO, 2009

Lita Cosner

Many anti-Christians turn to the Nazis for an example of the sort of evil that can be committed in the name of Christ. The myth that the Nazis were Christian is so common that many Christians cannot adequately answer it. If the Nazis *had* been Christian in name, all this would have proved is that not all who claim to act in Christ’s name are consistent with His teachings. But far from being Christians, the Nazis were *opposed* to Christianity and sought to stamp it out. In less than 100 pages, Bruce Walker, in *The Swastika Against the Cross*, sets out to document the Nazi’s opposition to Christianity using sources that were mainly written before and during the Second World War. As Walker points out, “The authors of these books had no idea how history would unfold; they did not know that the world would be plunged into a global war or that six million Jews would be exterminated in horrific fashion” (Introduction).

### Was pre-Nazi Germany Christian?

In the era leading up to Nazi Germany, Germany and the rest of Europe was characterized by growing hostility to Christianity. Instead, Europe was enamored with Darwinism and Communism: “Karl Marx and Charles Darwin captured the hearts and minds of men. . . . God was unnecessary; man was self-made, the survival of the fittest was the preferred method of improving the



human race provided by the only god that still existed—nature” (p. 2).

Germany, more than any other country, embraced both naturalism, fueled by Marxism and Darwinism, and the hatred of Christianity and Judaism that the new philosophies inspired. In fact, the same people wrote anti-Semitic propaganda were generally very anti-Christian as well. Over 100,000 Germans formally abandoned their professed faith between 1908 and 1914. More than that many left Christianity *every year* after World War I, and many who remained Christian did so only in name (pp. 4–6). By the time Hitler came to power, Christianity was barely present in Germany as a cultural force, much less a dominant or influential power.

### Was Hitler Christian?

Those who want to create a link between the Nazis and Christianity sometimes quote Hitler’s speeches where he referred to God or the Almighty or Providence. But the God