

Evolution's apostle bares his creed

A Review of
What Evolution Is
by Ernst Mayr
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Ernst Mayr is Emeritus Alexander Agassiz Professor of Zoology in the Museum of Comparative Zoology at Harvard University.

'He is universally regarded as a towering figure in the history of evolutionary biology and has received numerous honorary degrees and awards including the National Medal of Science, the Balzan Prize and the Japan Prize. [The late] Stephen Jay Gould, [then] Alexander Agassiz Professor of Zoology and Professor of Geology at Harvard University, [had] referred to Mayr as "the world's greatest living evolutionary biologist". With an incredibly productive career that began in the 1920s—spanning nearly eight decades—Ernst Mayr has undoubtedly been instrumental in shaping current evolutionary thinking. Many of his hundreds of technical articles and books have long been standard references in every area of evolutionary thought.'

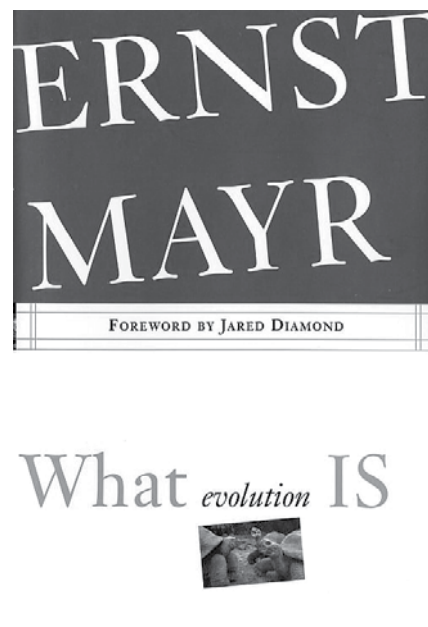
In Mayr's latest book, *What Evolution Is* (WEI), one interesting aspect is a point that is passionately denied by virtually every naturalist, namely, the religious nature of evolution. It is one thing to critique the merits of a scientific theory, but in the case of evolution a more fundamental issue is to distinguish the 'science' of evolution from the 'metaphysics' of evolution. While most naturalists are

quick to deny any connection between metaphysics and evolution, this does not alter the fact that the connection is there and that it has not gone unnoticed. Fortunately, through the ongoing work of many individuals it is becoming increasingly difficult for naturalists to justifiably maintain said denial.

It is the fact of this connection that renders most of WEI's content not open to scientific questioning. This is because once a paradigm is adopted as the *de facto* scientific position then observations may be (and are) interpreted in order to satisfy this paradigm. Interpreting natural evidence by the evolutionary paradigm is precisely what justifies most of the content in WEI. It is in this sense that Mayr's book is 'irrefutable' (sort of like trying to compete in a game where the opponent is making up the rules as the game progresses). Because of this I found it more important and worthwhile to address the foundation of Mayr's presentation, i.e. his philosophical footing, rather than concentrating on the 'science' contained therein. If the foundation is suspect, then the rest of the edifice should be understood to be equally shaky.

About science and not religion?

Right away—in the preface—Mayr tells us that one of his target audiences is the creationist '... if for no other reason than to enable them to be able to better argue against it [evolution]'. In the first few pages of Chapter 1 Mayr then attempts to list or define several aspects about creationism. Two quick comments: first, others and I are delighted that Professor Mayr wishes to 'enable creationists to better argue against evolution'. Second, Professor Mayr is most definitely not qualified to define



creationism and his efforts distinctly illustrate just how poorly qualified he is. Consider for instance that Mayr attributes to the creationist a constant world of short duration (Chapter 1, pp. 3–4). He wishes to contrast this (erroneous) view with the (obvious) world of change that we see around us and that evolution recognizes. He says on page 4, '[according to this creationist view] Everything in the world today is still as it was when created.' With all due respect to Professor Mayr, creationists are well aware of change in the world—i.e. that the world today is not as it was when created (nor could it be!). In fact, to creationists change is necessary for both scientific and theological reasons.

Mayr then says that 'This book is not the place to settle their [creationist] arguments ...' and concludes that section by providing a list of anti-creationist books. Displaying true scholarly form, a list of pro-creationist books is conspicuously absent; there is not even one such title listed in his bibliography of almost 200 references—a clear case of scholarly impartiality at its best. In addition, all throughout WEI Mayr constantly injects the metaphysical view of philosophical naturalism that he should identify to his readers (but never does). For instance, Mayr says, 'We still treasure these [creation] stories as part of our cultural heritage, but

we turn to science when we want to learn the real truth about the history of the world [emphasis mine]' (p. 5).

His words make it abundantly clear that Mayr regards anything other than naturalistic science as a sort of quaint adherence to a false view of reality; i.e. that only through purely materialistic science may we hope to arrive at real truth in the universe. This is philosophical naturalism, a religious stance, and so the question begs to be asked, what is this material doing in a 'science' book?

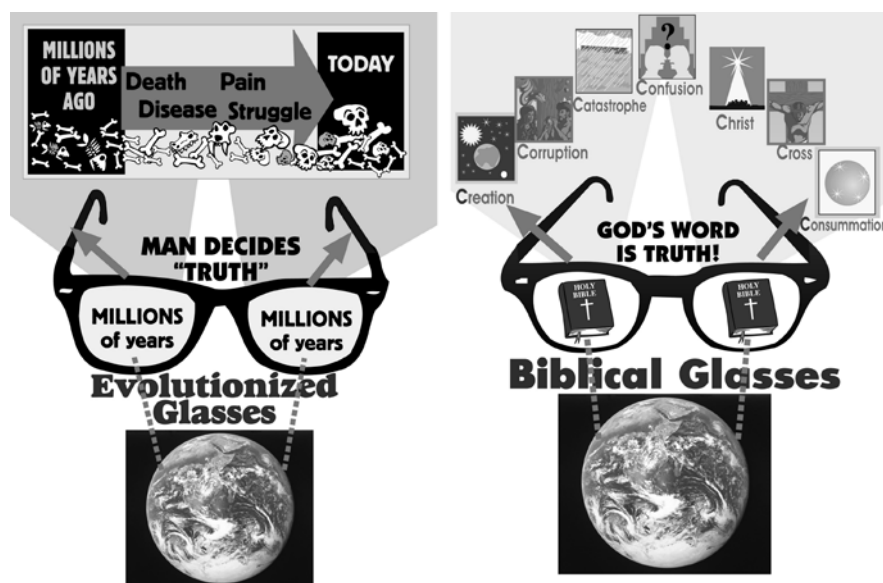
Later on page 5 Mayr writes, '... more and more scientific observations were in conflict with the biblical story. Its credibility was gradually being weakened by a series of [scientific] discoveries.'

Again, Mayr's metaphysical position is clearly revealed by this passage. It has never been the case that observations and discoveries have 'weakened the truthfulness or the credibility of the Bible'. Rather, increasingly more observations are being interpreted from the naturalistic paradigm and it is these interpretations that are in conflict with Scripture—this is hardly the same thing as what Mayr states. No clearer proof of this is that these same data, when viewed and interpreted by creationists, is found to support (or at least not conflict with) the creationist worldview.

'What evolution is' or 'what exactly is evolution'?

In Chapter 1 Mayr contrasts three views of the world—one where the world is eternal; one where the world is constant (i.e. static) but of short duration (he erroneously equates this as the creationist view); and the third as an evolving world, a world of change.

Mayr speaks of evolution as 'change' '... the world is of long duration and is forever changing; it is evolving'. 'Everything on this Earth seems to be in a continuous flux' (p. 7). The deceptive strategy in this characterization is painfully clear. After all, who in their right mind would argue against the fact that



It needs to be noted that all evidence is interpreted within a framework/worldview. The same evidence can be seen quite differently depending on the starting assumptions. Evidence viewed in a naturalistic worldview will never be seen as evidence for the existence of God, as God is ruled out of the equation a priori.

'things change'? But to take the step from 'things change' to 'and because of this, that's how everything got here' is a monumental leap in blind, irrational faith—the kind of faith that naturalists will vehemently deny.

In fact, Mayr is here participating in one of the most common strategies employed by naturalists defending evolution, namely, the 'slippery' definition of evolution (i.e. equivocation). Specifically, if a person disagrees with the 'fact of evolution', naturalists will whip out the definition of evolution that makes it impossible to argue against without appearing to be ignorant or fanatical. Mayr says, 'There is, however, one particular kind of change that seems to keep going continuously and to have a directional component. This change is referred to as evolution' (p. 8).

The subtle yet significant problem is that 'change' is not all that a person must accept upon accepting the evolutionary paradigm. In accepting the evolution that naturalists including Mayr promote, not only is the 'fact of change' to be accepted, but also that this change is the sole cause of the diversity and complexity of the Earth's entire biota. Proponents of evolution habitually hide the metaphysical ex-

trapolation of the data that is required to accomplish this feat, and WEI is plainly saturated with this scheme.

What's more, if WEI is to remain exclusively within the natural (i.e. the material) realm, which of course it does, then the term 'evolution' must somehow be further extended to include life from non-life. In other words, the emergence of life itself must also be accounted for by the ever-stretching definition of evolution (i.e. chemical evolution/abiogenesis must also be part of 'evolution').

Mayr addresses this topic in WEI, Chapter 3, 'The Rise of the Living World'. First of all, under any worldview no one was there to witness the emergence of life nor has anyone even come close to producing life, any life, in the laboratory. Furthermore, as scientific knowledge about what constitutes life increases, however 'simple' that life may be, the less likely it appears that life could arise from non-life. This notwithstanding, Mayr says:

'Astronomers estimate that it [Earth] became livable about 3.8 billion years ago, and life apparently originated at about that time, but we do not know what this first life looked like. Undoubtedly, it

[life] consisted of aggregates of macromolecules able to derive substance and energy from surrounding inanimate molecules and from the sun's energy. Life may well have originated repeatedly at this early stage, but we know nothing about this. If there had been several origins of life, the other forms have since become extinct. Life as it now exists on Earth, including the simplest bacteria, was obviously derived from a single origin [emphasis mine]' (p. 40).

Several telling signs of fanatical adherence to a particular worldview include the dismissal of evidence, expressing conflicting statements and a unique form of logic that eludes definition. In the above passage Mayr makes several remarks that taken in conjunction are, quite frankly, unintelligible.

Note how Mayr states that life may well have originated repeatedly, but that we know nothing of this, and yet he goes on to conclude that life today was obviously derived from a single origin. Such logical inference is, to say the least, perplexing! In any event, Mayr gets himself out of the evolutionist's intractable sticky-wicket of life's origin by saying, 'To avoid burdening this volume [WEI] with such detail [technical details of biochemistry], I refer the reader to the special literature dealing with the origin of life ...' (p. 43).

From this point forward in WEI, life is assumed to be 'present' and Mayr therefore focuses his attention on how life evolved from the aggregates of macromolecules that 'undoubtedly' existed, to the earliest organisms (prokaryotes, i.e. bacteria), through the eukaryotes (organisms with nucleated cells) and finally to the organic diversity and complexity that we find today.

Mayr clearly insinuates throughout WEI that to deny evolution is to not understand what evolution is. This is a roundabout way of saying that the creation-evolution controversy is a pseudo-problem that only exists because people (meaning creationists,

of course) aren't cognizant of the true meaning of evolution. Nothing could be further from the truth.

Clearly there would not be a creation-evolution controversy if it were universally agreed and adhered to that evolution meant solely 'change'. The fact that there is a creation-evolution controversy (a major one!) is because evolution is understood by all but the naïve to mean far more than just 'change'. Succinctly, the controversy exists because evolution—the full-fledged manifestation of evolution—is a metaphysical belief, a belief that promotes materialistic naturalism (natural laws and chance acting on matter/energy) over God (a Creator with purpose). For a man with Professor Mayr's credentials and experience to not be aware of this metaphysical connection is almost beyond belief.

After all, why is it that so many people are 'offended' by the theory of evolution to the point of fiercely opposing it? Why is it that emotions run so high and intellectual battles persist despite well over a century of serious debate? Because of ignorance of the subject? Hardly! Even though there will always be uninformed individuals on both sides of any dispute, a large and increasing body of well-educated people in the natural sciences, mathematics and other disciplines also disagree adamantly with the precepts of evolution. Evolution is offensive because it is bad science and because it is equally bad metaphysics—in short, evolution fails on all counts. As a result, the true source of the controversy is because of clashing metaphysics—the same type of conflict that exists when Christian theology faces Islam or Buddhist theologies/metaphysics, to name just a few.

The bottom line to all this is that the fundamental concept of evolution is clearly a manifestation of a metaphysical—not a scientific—worldview and, just as with any other religion, the facts must continually be interpreted and adjusted to fit with the beliefs. This fact by itself explains why a supposed 'science' book such as *What Evolution Is* must address a seemingly

disparate issue such as the objections to evolution from creationists—why else would Mayr even bother?

An instance of this is that although Mayr had earlier stated that WEI was not a book to settle creationist arguments, he nonetheless attempts to discredit creationists by cursory (and distorted) mention of one of our arguments involving the second law of thermodynamics (2LT). Creationists have often used the 2LT against the possibility of evolution and naturalists repeatedly claim to have refuted the creationists' argument. Their claim is without genuine substance and Mayr shamelessly propagates this falsehood in WEI:

'It is sometimes claimed that evolution, by producing order, is in conflict with the "law of entropy" [the 2LT] of physics, according to which evolutionary change should produce an increase of disorder. Actually there is no conflict, because the law of entropy is valid only for closed systems, whereas the evolution of a species of organisms takes place in an open system in which organisms can reduce entropy at the expense of the environment and the sun supplies a continuing input of energy' (p. 8).

The typical, shortsighted response to the creationists' 2LT argument is precisely that which WEI parrots above, namely, 'all biological systems are receiving energy—the planetary biota is an open system and this energy provides the fuel for growth'. To portray this idea, naturalists often use as examples a tree growing from a seed and an embryo developing into a complete creature. True, energy is being supplied to these biological systems but the crucial point of the argument is totally missed. Given the exposure that this argument has received over the years, one is forced to consider if this omission is by design.

To illustrate the fundamental point of the creationists' true 2LT argument, let's ignite a few gallons of gasoline near a tree or an embryo, thereby sup-



If energy were all that were needed to keep food fresh (or to increase the ordering in liquid water to form ice in the cube trays), why not just open the door of your refrigerator and blow in hot air with a fan heater? This is a flow of energy. Will that keep your food fresh? Hardly! Random energy pouring into a system will increase the tendency to destructuring of matter; to disorder, unless it is harnessed by a specific mechanism. The electricity for the fridge must flow into a motor, which is specifically coupled to a complex cooling mechanism programmed to function in a specific way. To put it simply, water tends to flow downhill, but it can be pumped uphill by a motor and the right machinery. In the same way, complex machines can be forced to arise from simple matter by appropriate programmed machinery (as occurs when living things make copies of themselves). But the programmed machinery cannot itself arise from non-living matter in the absence of such mechanism. To achieve that would require the direct input of mind or intelligence.

plying these with plenty of energy, and then let's stand back and watch them grow. Of course, what'll happen is they will be incinerated! The obvious point is that energy by itself is not the key to growth—energy reception, storage and utilization is the key. In other words, there must be a highly sophisticated and fully functional energy management mechanism—a mechanism that enables energy capture, conversion, storage and regulated output—if a tree is to grow or an embryo is to develop into a mature creature.

The intractable question to the naturalist is then: how is a mechanism of such inherent complexity possible, even in theory, within the framework

of a paradigm that unequivocally demands base simplicity at the emergence of life? This is the crux of the creationist argument involving the second law of thermodynamics and not some easily discarded straw man pseudo-argument that, not surprisingly, naturalists prefer to respond to. That is why creationists generally argue against information increase, a special case of entropy reduction.

Conclusion

What Evolution Is is valuable in that an undisputed world authority on the subject provides a clearly stated presentation of current evolu-

tionary thinking. Granted, this is no small thing and in that respect *What Evolution Is* will serve as an excellent reference on the subject for years to come.

But as far as the controversial issues—including the mountains of publications and findings that are contrary to the evolutionary paradigm—in *What Evolution Is* Mayr 'wisely' opted to avoid these matters except for a token mention and an even quicker dismissal. Specifically, Mayr states that 'The claims of the creationists have been refuted so frequently and so thoroughly that there is no need to cover this subject once more' (p. 269). Frequently and thoroughly? My guess is that Professor Mayr is saving this material to surprise us with his next book: *What Evolution Is Not*.

References

1. Foreword by Jared Diamond in *What Evolution Is*; also: *Scientific American* **283**(1):66–71, 2000.

Moving foundations

'The record shows that the conceptual foundations of science are repeatedly remodeled.'

John Maddox
What Remains to be Discovered
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