

## Preface

How did we get here? That is one of life's most fundamental questions. And the most commonly accepted answer to that question is what is known as Darwinian Evolution.

The aim of this book is to examine what Darwinian Evolution is and what it would have to achieve, so that the reader can decide if Darwinian Evolution is the correct explanation for how we got here. Its supporters assert that it is proven fact which is based on scientific evidence. Opponents say it is driven by a philosophical belief, based on an often unspoken commitment to atheism, in the form of what those learned in the subject like to refer to as methodological naturalism.

This book is aimed at a wider audience who may have no prior knowledge of the subject but are interested in finding out more. In my experience an awful lot of these people consider books on Darwinian Evolution to be very dry, boring, and difficult to understand, and having read some of them I can understand why! I had no desire to add my name to the list of authors who have achieved this feat, so I set myself the challenge of writing something unusual: a humorous, interesting, and accessible book on Darwinian Evolution.

As I am a lawyer and not a scientist it is perhaps not surprising that I approach the subject from a lawyer's point of view. Some may object to such an approach, but in my view any such objection is without merit. As a society we are happy to adopt a lawyer's, or legal, approach when it comes to analysing and evaluating evidence in matters of great importance, ranging from deciding whether someone is guilty of murder to whether children should be taken from their parents and placed in care. If a legal approach is good enough to determine factual matters of such gravity, then it is surely good enough to evaluate the evidence for Darwinian Evolution.

Adopting this approach, the first section of the book (chapters one to three) deals with the three-stage process of how something is proved in a court of law, with specific reference to what it takes for someone to be found guilty of theft. Applying what I have called the 'evidence-based

approach', the first stage is to establish the facts, the second to establish what has to be proved to secure a conviction for theft, and the third to put the two together to see if the offence can be proved from the facts.

In the second section (chapters four to fourteen) I apply the evidence-based approach to Darwinian Evolution. In chapters four to six I set out the facts, and in chapters seven to nine I explain what has to be established for Darwinian Evolution to be proved. The two are put together in chapters ten to fourteen to see if Darwinian Evolution can be proved from the facts.

In the penultimate chapter (fifteen) I look at why Darwinian Evolution holds such a prominent, almost unassailable position in the scientific community, and address the charge that the pursuit of true scientific knowledge has been usurped by a philosophical position; a commitment to atheism and a refusal to allow the evidence to speak for itself. This leads to the final chapter, where I summarise all that has gone before and invite the reader to reach their own conclusion.

On occasions when I have given talks or presentations on the subject of Darwinian Evolution two objections have nearly always cropped up. In short, it appears that people have one very common objection to someone like me voicing an opinion on this subject and one very common objection to my argument. Neither objection has any merit but due to their apparent popularity I will deal with them now.

The first objection is that as a 'non-scientist' my arguments carry little, if any, weight as I have no expertise in science in general or in biology in particular. This is of course just another way of saying that only trained scientists, particularly biologists, can and indeed should comment on matters such as Darwinian Evolution.

My response to this objection is that it is self evidently nonsense. In pretty much all areas of life we come across experts. In fact it never ceases to amaze me how quickly broadcasters like the BBC can locate experts to speak on whatever story has just broken in the news. Usually people are presented as experts for one, or both, of two reasons. Either they have the appropriate academic/professional qualifications, or they have suitable on the job experience.

It is certainly not my intention to ridicule experts. They play an important role in many areas of life and can provide invaluable advice and assistance. However, experts are not infallible and, more particularly, experts do not

and must not be allowed to decide arguments. You cannot decide whether something is true or false simply because an expert says it is true or false. Evidence decides arguments, not experts.

A legal analogy may assist. If you were on a jury and you had an expert in front of you (in any field, it could be medical, ballistics, forensic), that expert will give an opinion. But he or she doesn't get to decide the case, doesn't get to decide the argument. You do. That's because you are members of the jury. The expert can present his/her opinion and, importantly, can say why they hold that opinion. If you happen to believe that the reasons for the opinion are valid, then you are going to agree with it. If you don't, you can disagree with it (provided you have good grounds for doing so), and the decision is yours, because you are making the decision, not the expert.

The importance of the role of the jury becomes even more apparent in those cases where there are two or more experts and they do not agree. For those who object to the non-scientist commenting on matters of science, the logical solution to determine which of two or more opposing experts to believe would be to go with whichever expert is the most qualified. On the other hand, most reasonable people would agree that the best solution would be to examine why each expert held their respective views and then evaluate which view was best supported by the evidence.

You will often hear a statement such as 'all scientists agree' or references to the 'scientific consensus', and invariably these are relied upon to prove the truth of something that has been asserted. But a moment's thought will confirm that whilst it may be factually correct to state that 'all scientists agree' on the truth of some particular point, that does not, in and of itself, mean that the particular point is in fact true. It is highly suggestive that it may be true, it is very useful information to have to hand when trying to decide whether that something is true, but it does not mean it has to be true.

What if your assertion to me is that all scientists agree on the truth of Darwinian Evolution and therefore it must be true? Leaving aside the fact that such an assertion is patently false (there are many thousands, albeit a minority, of scientists who do not accept Darwinian Evolution), am I not entitled to seek to explore why so many scientists hold that view? Surely I am allowed to enquire as to the basis for their believing what they believe?

Is it really too much to allow me to ascertain the foundation of their belief, the evidence on which their belief is based? And why can't I examine that evidence to see if it shows what they say it shows, to see if it supports their conclusion?

The often implied but rarely openly stated response to my questions is that as a non-scientist I will not be able to understand the evidence sufficiently well to reach an informed and correct conclusion. But if that is the case why do so many scientists spend so much time writing books and giving talks aimed at non-scientists and seeking to demonstrate why Darwinian Evolution is true? They cannot have it both ways. Either the evidence is accessible and capable of being understood by non-scientists or it is not. If it is, then non-scientists are perfectly entitled to evaluate the evidence and form an opinion as to whether it supports Darwinian Evolution. If on the other hand it is not, then those scientists have been taking money from us under false pretences, asking us to buy their books when all along they knew we couldn't understand what they had written.

The second objection is that the application of a lawyer's approach may not be appropriate with regard to how science actually works, or the philosophy of science.

Discussion in terms of 'facts', 'assertions' and 'proof', it is asserted, misses the interplay of fact and theory. Put another way this objection is simply stating that matters of science cannot be proved in the same way as matters of law and should not therefore be subjected to the same standard of proof.

This objection is at best disingenuous. Whatever one might think about the philosophy of science and how scientific theories are open to challenge if new evidence comes along, it is beyond question that Darwinian Evolution is presented as an indisputable proven fact in the public sphere. Students are not taught that Darwinian Evolution is currently the best inference from the available facts but that if new facts emerge it may have to be re-examined. They are taught that Darwinian Evolution is a scientific fact, proved beyond any reasonable doubt and supported by all the scientific evidence.

As long as the supporters of Darwinian Evolution declare it to be 'proven' and supported by the 'facts' they cannot sensibly complain if people like me adopt a lawyer's approach when dealing with issues of

'proof' and 'facts', and if people reach their own conclusions based on the evidence.