

SAM MCKEE

Response to Philip J. Senter on arguments for Behemoth as a dinosaur

Senter makes a convincing case against Behemoth being a dinosaur in Job 40. He also deals with arguments for Leviathan and where elsewhere theologians have sought to categorise dinosaurs in scripture. I argue that, from the perspective of philosophy of science, we cannot conceive of dinosaurs in scripture seriously and it is time to lay the debate to rest for reasons other than translation.

Keywords: Behemoth, Leviathan, dinosaur, Old Testament, philosophy of science, creationism

Introduction

I was greatly encouraged by Philip J. Senter's excellent critique of Behemoth in Job 40 referring to a sauropod, as well as his technical criticism of the mistakes that have led to people manufacturing dinosaurs into scripture. The zoological and linguistic elements of his assessment of the error are conscientious and impressive.

I am taking this opportunity to add further reasons as to why Behemoth and Leviathan have been misplaced as dinosaurs because it occurs in popular theological speculation and is used by evangelistic laypeople frequently. There are a great deal more reasons as to why dinosaurs in the Old Testament is a category error and I wish to address some from my own discipline of philosophy of science to add to Senter's article.

A philosophy of science case against dinosaurs in scripture:

1. Falsifiability

My first case against dinosaurs in scripture is one of verification and falsifiability. Karl Popper's famous criterion of demarcation was falsifiability.¹ Loosely defined, this means that a theory has scientific value not by being verified by evidence, but by whether or not it can be falsified. Senter outlined the different lines of evidence theologians and believers used in the 19th and 20th centuries to make a case for Behemoth being a sauropod. However, given the

1 See Popper, K. *Conjectures and Refutations*, London: Routledge & Kegan Paul, (1963)

extraordinary lack of data available, one questions whether or not this could ever be falsified. This is immensely difficult for those wanting to make any case for scripture making a scientific claim. There is no way using Popper's criteria to show whether this could be true or not from a philosophy of science perspective.

The lack of data available is also a problem for any meaningful verification. All that really remains is conjecture, for if one were to make the strongest steel man using all of the arguments well outlined in Senter's two figures, it is nowhere near enough to overturn the case for a supernatural, primeval creature. One could not make, for example, a Linnean classification on the basis of the verses.

The undetermination of data is also an important problem in philosophy of science.² There is never enough evidence to conclusively prove one theory and there are always an infinite number of possible theories that could not be disproven in its place.³ However, as Table 1 shows in Senter's article, there are very few lines of data provided at all by its proponents, and these are based on very few scriptures. The data underdetermines the theory of Behemoth as dinosaur in the Old Testament considerably and would never be enough to be accepted as a scientific hypothesis.

In terms of lines of evidence, there is also no basis for comparison of dinosaurs described in antiquity. We have no data to suggest that dinosaurs were excavated and understood as creatures from a previous era. The problem of conjecture is compounded, and thus we have no predictive character to lay against the text.

2. History of science: Richard Owen

Senter outlines a variety of thinkers in Table 1 who have theorized Behemoth and Leviathan as dinosaurs. An alternative, hypothetical table could be assembled of key thinkers of the time who did not make this conclusion, or came to the opposite. A good example of this would be Richard Owen, founder of the Natural History Museum in South Kensington, London. Owen was a Christian as far as we know, and was a recipient of many of Charles Darwin's collections. He certainly would have known as much about dinosaurs as any Christian scientist of his time and yet is not mentioned in Senter's Table 1. One could mention any of the great early paleontologists, as well as modern experts

2 Duhem, P. *The Aim and Structure of Physical Theory*, Princeton, N.J.: Princeton University Press (1954) and Quine, W. V. *From a Logical Point of View*, Cambridge, Mass.: Harvard University Press (1953).

3 A breakdown of this can be found in Curd, M., Cover, J. A. and Pinnock C. *Philosophy of Science: The Central Issues, 2nd Edition*, New York: W. W. Norton & Company (2013) pp. 225-226.

such as Professor Simon Conway-Morris at Cambridge University.

The history of science stands heavily against the idea of dinosaurs in the Old Testament, as much as the theological and linguistic arguments made compellingly by Senter.

3. Creationism and humanity overlapping dinosaurs

There is an acute problem of bias found in Table 1, in that writers such as Ham and Gish are notable Young Earth Creationists. When one has to find ways of reading dinosaurs into the Old Testament to support one's theological claims, then the bias problem in philosophy of science becomes deeply problematic. Not only does the falsification criterion of Karl Popper work against the Creationist hypothesis, but one has a verification problem as posed by those in the Vienna Circle (Logical Positivism).⁴

Put simply, a Young Earth Creationist *needs* to find dinosaurs in scripture for their theory to be viable, yet they are not evident, so one must construe them in wherever possible. Given the vague descriptions and lack of data, Leviathan and Behemoth are the only viable candidates and so dinosaurs are sought out that may fit the limited description. This is phenomenally bad practice in philosophy of science and would never be acceptable in any other scientific discipline. Creationists are incredibly brutal in their criticism of early hominids (which feature much later than dinosaurs) due to limited fossils, such as the incomplete skeleton of "Lucy." There is a strong double-standard when this is applied to classifying Leviathan or Behemoth as dinosaurs on the limited textual evidence given.

Conclusions

There is no basis in demarcation criteria in philosophy of science to classify dinosaurs in scripture. There are serious epistemological and hermeneutical problems with taking the limited data and applying it to a description of Behemoth or Leviathan.

Furthermore, the Young Earth Creationists are forcing an issue in a manner unacceptable to any philosopher of science based on bias. Theory is preceding data in a manner that would lead to an initial rejection of the hypothesis.

Therefore, philosophy of science, as well as Senter's assembled arguments from theology, history and linguistics, mean it is not possible to determine dinosaurs in the Old Testament.

Samuel McKee is associate tutor and doctoral researcher in philosophy of science at Manchester Metropolitan University

⁴ See for example, the summary in Carnap, R. in Gardner, M (ed) *Philosophical Foundations of Physics*, New York: Basic Books (1966) pp. 12-16.