

[2018 Prelim] Can history be a science?

1 It would be pointless to try to discuss the question, “Can history be a science?” without clarifying its central terms, “history” and “science”. Let us first say that science is the systematic and critical search for the apposite understanding of law-governed phenomena; a search that is grounded in the application of recognised standards of evidence, inference and sound practice. Let us now say that history is the systematic and critical search for the understanding of past events, selected and treated with a view to their human significance; a search which is grounded in the application of recognised standards of evidence, inference, and sound practice.

2 We see immediately that this characterisation of history reiterates many of the elements that were included in our characterisation of science. History is described as a systematic and critical search for understanding, and this – particularly as regards the implications involved in describing history as systematic and critical – is to be understood in more or less the same way as with Science. We have also described history, like science, as grounded in the application of recognised standards of evidence, inference, and sound practice.

3 Having looked at the elements common to our characterisation of science, on the one hand, and history, on the other, let us now turn to the special elements included in our description of history. We have characterised history as concerned with past events, selected and treated with a view to their human significance. Much of what historians have to tell us concerns what people have done, for instance that Caesar led his legions across the Rubicon, thus defying the Roman republican government; or that on 1 January 1863, Abraham Lincoln issued a proclamation abolishing slavery in the United States; or that Parisians stormed the Bastille on 14 July 1789.

4 The past events with which the historian is concerned are first and foremost human actions. But most past events – most past human actions – are of no concern to the historian. It is only those events whose human significance is robust that belong to the subject matter of history. Thus, Napoleon’s presenting the Empress Josephine with a gold necklace in 1807 would not have human significance in the sense meant here; but his reconciling with the Emperor Alexander of Russia in 1807 would.

5 It seems that historians have quite different ideas about the events that have human significance. A long tradition in history selects mainly particular acts of powerful political figures as having significance of this kind. Perhaps the greatest part of written historical work focuses upon the struggles of such figures to gain and retain power, and upon the acts that they performed in exercising that power (eg levying taxes, suppressing religions, building fleets, commissioning calendars, mounting wars, and reforming laws). When historians remain silent about events in the lives of common people, for instance – as they have indeed done until quite recently – they reflect their judgment that such events are of little consequence or in our terms lack “human significance”.

6 On what basis, however, do historians make such judgements of “significance”? In the end, it comes down to values, which are subjective to the historian. And this is the key difference that makes History incapable of being classified as a Science: the subjectivity of the inquirer in selecting their object of inquiry.

Adapted from original text by Mikael M. Karlsson

1. Explain the writer's claims in this passage about the nature and construction of knowledge in History. Evaluate his reasoning here and challenge or support it with arguments of your own.

[2015 Prelim]

1 Albert Einstein was once asked what would have happened if the first experiments to test his theory of general relativity had produced observations that hadn't agreed with the theory. 'Then,' said Einstein, 'I would have been sorry for the dear Lord, for the theory is correct.' As the Danish physicist Niels Bohr commented at the time, he was a little too fond of telling God what to do. But this wasn't sheer arrogance, nor parental pride in his theory. The reason Einstein felt general relativity must be right is that it was too beautiful a theory to be wrong.

2 This sort of talk both delights today's physicists and makes them a little nervous. After all, isn't experiment – nature itself – supposed to determine truth in science? What does beauty have to do with it? Aesthetic judgments do not arbitrate scientific discourse: ultimately, theories are judged by how they fare when faced with cold, hard, experimental facts. Some give Einstein the benefit of the doubt: perhaps he was just saying that beauty in a theory is a good guide, an indication that you are on the right track.

3 But Einstein was arguing for more than that. It was Einstein, after all, who said that 'the only physical theories that we are willing to accept are the beautiful ones'. Einstein seems to be asserting that beauty trumps experience come what may. He wasn't alone. The great German mathematician Hermann Weyl, a colleague of Einstein's at the Institute of Advanced Studies in Princeton, wrote: 'My work always tries to unite the true with the beautiful; but when I had to choose one or the other, I usually chose the beautiful.' Even Lev Landau and Evgeny Lifshitz, in their seminal but pitilessly austere midcentury *Course of Theoretical Physics*, were prepared to call general relativity 'probably the most beautiful of all existing theories'. Today, popularisers are keen to make beauty a selling point of physics. The quantum theorist Adrian Kent speculated that the very ugliness of certain modifications of quantum mechanics might count against their credibility. After all, he wrote, here was a field in which 'elegance seems to be a surprisingly strong indicator of physical relevance'.

4 So much, you might be tempted to conclude, for scientists' devotion to truth: here were some of its greatest luminaries, pledging obedience to a different calling altogether. But an insistence that the 'beautiful' must be true all too easily elides into an empty circularity: what is true must therefore be beautiful. Neither makes sense. John Keats's wrote that 'Beauty is truth, truth beauty': as far as science is concerned, these beautiful words cannot be true.

Adapted from "Beauty is Truth? There's a False Equation", Philip Ball

1. Explain the writer's claims in this passage about the nature and construction of knowledge in the sciences. Evaluate his reasoning here and challenge or support it with arguments of your own.