Long Passage [RI Promo 2022]

The main conclusion of the passage is that there is great danger in believing social science to be scientific. This is undergirded by a central intermediate conclusion that even though social science purports to discover absolute truths about humanity, it is nowhere as justified as science is. The author offers three reasons why: (1) that measurements are never precise in social science, (2) that social science can never achieve the same predictive power as the natural sciences, and (3) theories 'predict' phenomena only because of the self-fulfilling prophecy. Ultimately, while I accept the author's claim that social sciences, I do not agree with the author's ultimate position that the social sciences should not be believed to be scientific.¹

The author's first two reasons are undergirded by a central comparison of social science with the natural sciences — he first argues that social science cannot achieve the same precise measurements as the natural sciences, because people are unique and some social phenomena (e.g. social bonds) cannot be adequately quantified. This is an accurate observation — indeed, many social scientists have to resort to inadequate proxies to quantify intangible phenomena. For instance, the World Happiness Report assigns a numerical value for how happy a particular nation's populace by measuring the tangible metrics of GDP per capita, healthy life expectancy and the amount of social support. Not only do these metrics not adequately capture the full complexity of human happiness (influenced by intangible factors like family ties, romantic success etc.), but they also fail to account for the varying conceptions of happiness unique to each individual — one might really value their quality of sleep but another might value the quality of public transport. Additionally, the author is right to point out that natural phenomena are far more "simple and stable" - while voltage is only determined by current and resistance (V=IR), human satisfaction is influenced by far more factors as explicated above, making it inherently difficult to precisely quantify in a mathematical manner. To that end, the author's claim that social science is not as precisely quantified as the natural sciences hold water, lending weight to his claim that the social sciences are 'less justified' than the natural sciences.²

The author's second reason — that social science achieves less predictive power is also an astute and accurate one. The author first correctly explains that social systems are affected by the presence of an observer — this Hawthorne effect has been widely documented across social scientific study. In the 1920s, researchers found that the presence of an observing researcher in Western Electric's Hawthorne Works increased worker productivity, rather than the intended independent variables of lighting conditions and break times. Additionally, pedagogical researchers have found that children over Grade 9 pay more attention in class when their lesson is being observed. If test subjects modify their behaviour when they are being studied, the ability of social science to offer reliable, objective predictions is thus questionable. The author subsequently offers the example of economists failing to predict economic recessions in 2007 and 2020. While perhaps a cherry-picked example, as economists are generally accurate in their predictions up to 8 months before the end of the year and could not have foreseen the Covid-19 pandemic, it does show that economists are unable to reach the same level of predictive accuracy of the natural sciences since society is far more complex.³ In this light, this second line of reasoning holds, making his sub-conclusion that social science is less justified than science persuasive.⁴

However, the author's third claim — that successful predictions are only because of self-fulfilling prophecies — is perhaps his least persuasive reason. While economic predictions are especially vulnerable to self-fulfilling prophecies as consumers can panic buy (as seen during the Covid-19 pandemic_, this problem afflicts other fields of social science to a much lesser degree. For instance, pedagogical research about the use of productive failure to boost student performance seems to not encounter this problem — students do not 'improve their grades' by virtue of learning about this technique alone.⁵ Hence, it is perhaps a stretch to claim that *all* successful social scientific predictions are a result of self-fulfilling prophecies.

⁴ Ok.

² How does precision impact justification?

³ Anything else you can say about this? AO1?

⁵ Ok, and? Consider the implications on social scientific knowledge in general. (Explain the larger point / principle.)

Ultimately, I agree with the author's sub-conclusion that social science cannot be as 'justified' as science — problems with quantification and predictive accuracy do undermine its claim to offer 'objective universal laws' and absolute truths. However, it must be acknowledged that the author is focusing only on a narrow spread of positivist social scientific disciplines (e.g. economics, clinical psychology) that truly purport to offer 'objective universal laws' and uncover unchanging social facts. On the other hand, interpretive disciplines like anthropology do not have such grand ambitions, instead seeking to use the scientific method to uncover the meaning communities attribute to their behaviours and generate a "thick description" of what a particular practice means to the people involved.⁶ For instance, Clifford Geertz's seminal 1973 paper "Notes on the Balinese Cockfight" only made claims specific to the Balinese culture and that particular cultural practice, even as it employed the scientific method of observing the phenomenon, hypothesising about it and collecting data through interviews.⁷ Against this backdrop, it is perhaps unfair to hold all of social science as 'unscientific', based on the aims of positivist researchers alone.⁸

Further, demonstrating that social science is less 'justified' than science is insufficient to show that it should not be regarded as "scientific" at all — even the most staunch positivists would not make the ambitious claim that social scientific knowledge is as reliable or objective as physics knowledge.⁹ Social scientists also employ numerous methods to improve their reliability and objectivity or qualify their conclusions — for example, using anonymous surveys to overcome the Hawthorne effect, or offering different economic predictions to reflect best and worst-case scenarios in recessions. Hence, the author's comparison to science shows, at best, that social science should not be regarded as scientific to the same degree as the natural sciences, but not that it should be discounted as 'unscientific' altogether.

Thus, while I accept the author's generally well-proven sub-conclusion that social science is less 'justified' than science based on its comparatively lower precision in quantification and predictive power, his eventual conclusion that "it is dangerous to believe social science is scientific" is too extreme and under-substantiated.

⁶ How does the aim of a discipline relate to justification?

⁷ Ok...

⁸ But why should we care about the aims of the discipline / approach? What's the implication on justification? Focus on the author's criticism (the heart of it).

⁹ Why though?

Score

AO1: 9/10 AO2: 13/15 AO3: 5/5 Total: 27/30

Comments

Excellent response! Clear understanding of the author's argument and what he was trying to achieve in his criticisms against social science. Reconstruction is good (although the points about bias and labelling were not taken into account, but this was not a big deal). Evaluation is thorough, comprehensive and had sufficient examples that were accurate, relevant and largely effective! Response is also very concise. Good job!