

# “The Philosophy of Howard Stein”, Lecture 10: “Yes, but...”

Erik Curiel<sup>†</sup>

Monday 5<sup>th</sup> July, 2021

## Contents

<b>1 Overview</b>	<b>1</b>
<b>2 Additions and Emendations to Hand-Written Notes</b>	<b>1</b>
<b>References</b>	<b>2</b>

## 1 Overview

The fundamental point of Stein (1989): the most important point in understanding scientific knowledge is to have a suitably rich, sophisticated and intelligible understanding of the possible relations between theory and phenomena; and this does not distinguish between whether one is—or can cogently be—a realist or an instrumentalist; in fact, once one has such an understanding in hand, one realizes that it does not matter whether one is a realist or an instrumentalist.

## 2 Additions and Emendations to Hand-Written Notes

Hand-written notes:

<http://strangebeautiful.com/lmu/lectures/stein-lect-11-yes-but-handwritten.pdf>

additions and emendations to them:

1. p. 1: 4th theme: one must have rich enough conception of relation between theory and phenomena to account for all kinds of scientific knowledge, all ways that knowledge is produced and used, developed and elaborated, for the entire enterprise of science, and this is the heart of an adequate and appropriate understanding of science and scientific knowledge—but both instrumentalists and realists can avail themselves of all such relationships

---

<sup>†</sup>**Author’s address:** Munich Center for Mathematical Philosophy, Ludwig-Maximilians-Universität; Black Hole Initiative, Harvard University; Smithsonian Astrophysical Observatory, Radio and Geoastronomy Division; email: [erik@strangebeautiful.com](mailto:erik@strangebeautiful.com)

2. p. 1: Wigner’s remark: I think Howard intends this to show that theories are used for more than predictions in the following sense; one may still cavil and say, “but the density of aluminum *is* a prediction!”, but that is to miss the point; theories tell us about and explain the properties and behaviors of stuff out in the wild, not only under controlled experimental circumstances, *viz.*, the *phenomena*
3. p. 2: on IBE, see arguments of Fine (1984), to effect that it can’t be used to argue for realism, in so far as it itself is a form of argument used in scientific practice, but to argue for meta-theoretic principles such as realism one cannot employ the same forms of argument as in science, for that would to assume from the start that the form of argument at issue is not only such as to lead to success but to further assume illegitimately that it does so in virtue of conducing to and preserving truth—which is what was to be demonstrated in the first place

## References

- Fine, Arthur. 1984. “The Natural Ontological Attitude”. Chapter 4 in *Scientific Realism*, edited by Jarrett Leplin, 83–108. Berkeley: University of California Press.
- Stein, Howard. 1989. “Yes, but...: Some Skeptical Remarks on Realism and Anti-Realism”. *Dialectica* 43 (1-2): 47–65. doi:[10.1111/j.1746-8361.1989.tb00930.x](https://doi.org/10.1111/j.1746-8361.1989.tb00930.x).