

1135-A5-301

Jae Yong John Park* (parkjohn0109@gmail.com), 16 Warren Street, Apt. 5, New York, NY
10007. *Fictionalism, Constructive Empiricism, and the Semantics of Mathematical Language.*

In Field's fictionalism, good mathematical theories do not need to be true, but rather must be consistent and conservative. Likewise, Van Fraassen views science to be nothing more than a study of obtaining truths about the observable phenomena of the world, so good scientific theories need not be true, merely empirically adequate. The takeaway from this comparison is that the concepts of acceptance and empirical adequacy of constructive empiricism can be used to better understand fictionalism. At first glance, constructive empiricism does not seem to help the case of fictionalism because the constructive empiricism is based on the possibility of empirical verification, which is also the basis of indispensability argument. This paper argues, however, that the empirical adequacy of scientific theories is comparable to the conservative nature of mathematical theories. By understanding that a scientific theory need not be entirely true, the falsity of mathematical statements in the fictionalist view becomes more graspable. (Received August 21, 2017)