Metaphilosophical Ruminations on Theoretical Term Reference

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Abstract

Most scientific realists nowadays would endorse an argument like the following: The empirical and explanatory success of theories or theory-parts is a good indicator of their approximate truth. In turn, approximate truth is a good indicator of referential success. Successor theories typically preserve all of the empirical and explanatory success of their predecessors as well as add to it. They are thus in general strictly more approximately true than their predecessors. Moreover, by preserving their predecessors' approximately true parts they preserve the referential success the predecessors probably enjoy. This implies that successor theories that are more approximately true than their predecessors are typically also referentially continuous with them.

An evaluation of these claims requires a clear understanding of the concepts involved. My aim in this paper is to examine the concepts of referential success and of referential continuity. I start by considering the three dominant theories of reference, namely descriptivist, causal-historical and causal-descriptivist theories. In particular, I examine the intuitions that motivate each of these theories. Since several of the intuitions cited in support of competing theories are conflicting, something has to give way. Two policies have thus far proved popular. The traditional (conceptual analysis) policy has been to reject the evidential worth of some intuitions in favour of one theory or another. A more radical policy that has emerged out of some quarters of the experimental philosophy camp has called for the blanket denial that intuitions have any evidential worth. According to this policy intuitions may at best play only a heuristic role. In contrast to both of these policies, I explore a largely ignored third alternative compatible with moderate forms of conceptual analysis and experimental philosophy. This policy calls for the evidential utilisation of most intuitions, even those that are conflicting. To accommodate conflicting intuitions one needs to partition them into different internally consistent sets. Each set is then taken to lend credence to a distinct concept of reference. I argue that so long as we identify which concept is employed in which circumstances, some disputes about reference disappear. What is more, I illustrate how different concepts can be used to make sense of the historical record of science and to evaluate scientific realist claims.

This paper is as much about meta-philosophical concerns with the role of intuitions as it is about theories of reference and the scientific realism debate. Regarding the former, I hope that a blueprint will emerge for similar projects in other philosophical domains. Regarding the latter, I hope to provide compelling reasons why an account of multiple referential concepts does justice to the motley of our linguistic practices. Ultimately, I hope that such an account helps disentangle claims about referential success and continuity in the scientific realism debate by making perspicuous which concepts are best equipped to evaluate the realist's epistemic claims against the historical record of science.