Progress as approximation to the truth: a defence of the verisimilitudinarian approach

This is the author's manuscript

Original Citation:

Availability:
This version is available http://hdl.handle.net/2318/144178 since 2016-04-06T07:16:52Z

Published version:
DOI:10.1007/s10670-012-9362-y

Terms of use:
Open Access
Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.

(Article begins on next page)
Progress as Approximation to the Truth: A Defence of the Verisimilitudinarian Approach

Gustavo Cevolani · Luca Tambolo

Received: 19 August 2011 / Accepted: 23 January 2012 / Published online: 14 February 2012 © Springer Science+Business Media B.V. 2012

Abstract In this paper we provide a compact presentation of the verisimilitudinarian approach to scientific progress (VS, for short) and defend it against the sustained attack recently mounted by Alexander Bird (2007). Advocated by such authors as Ilkka Niiniluoto and Theo Kuipers, VS is the view that progress can be explained in terms of the increasing verisimilitude (or, equivalently, truthlikeness, or approximation to the truth) of scientific theories. According to Bird, VS overlooks the central issue of the appropriate grounding of scientific beliefs in the evidence, and it is therefore unable (a) to reconstruct in a satisfactory way some hypothetical cases of scientific progress, and (b) to provide an explanation of the aversion to falsity that characterizes scientific practice. We rebut both of these criticisms and argue that they reveal a misunderstanding of some key concepts underlying VS.

1 Introduction

The nature of progress has traditionally been a central concern for philosophers of science (see, e.g., the surveys by Dilworth 2008; Losee 2004; and Niiniluoto 2011a). Starting from the mid-1980s, a new approach to this old-age issue has emerged, based on the view that scientific progress can be accounted for in terms of the increasing verisimilitude or, equivalently, truthlikeness, or approximation to the truth, of our theories. More specifically, the supporters of this approach claim that

G. Cevolani (✉)
Department of Philosophy, University of Bologna, Piazza Sassatelli 26, 41057 Spilamberto, Modena, Italy
e-mail: g.cevolani@gmail.com; gustavo.cevolani@unibo.it

L. Tambolo
Department of Philosophy, Languages, and Literatures, University of Trieste, Via Ponte Albano, 51 40037 Sasso Marconi, Bologna, Italy
e-mail: l_tambolo@hotmail.com