

| | |
|-------------------------|--|
| 1. Record Nr. | UNINA9910453499603321 |
| Autore | Harris Errol E. |
| Titolo | Hypothesis and perception : the roots of scientific method // Errol E. Harris |
| Pubbl/distr/stampa | London ; ; New York : , : Routledge, , 1970, 2013 |
| ISBN | 1-138-87116-8 1-315-83001-9 1-317-85159-5 1-317-85160-9 |
| Descrizione fisica | 1 online resource (400 p.) |
| Collana | Muirhead Library of Philosophy ; ; Volumes 17 |
| Disciplina | 501 |
| Soggetti | Science - Methodology Hypothesis Perception Electronic books. |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Cover; Half Title; Title Page; Copyright Page; Original Title Page; Original Copyright Page; PREFACE; Table of Contents; PART ONE: CRITICAL; I. PREVALENT VIEWS OF SCIENCE; i. The popular view; ii. Philosophical views; II. INDUCTION; i. Disclaimer of necessity for justification; ii. Induction and probability; iii. The pragmatic justification of induction; iv. Instrumentalism; v. New puzzles for old; vi. The unreasonableness of induction; III. THE EMPIRICIST TREATMENT OF DEDUCTION AND NECESSITY; i. Conventionalism; ii. Deduction and explanation; iii. Counterfactual conditionals; iv. Conclusion IV. EMPIRICIST REFORMERSi. Dilution of empiricism; ii. Kneale on necessity, perception and consilience; iii. Popper on falsification; (a) Basic statements; (b) Hypothetico-deductive method; PART TWO: HISTORICAL; V. NON-EMPIRICAL ASPECTS OF SCIENTIFIC PROCEDURE; i. The Copernican revolution; (a) Copernicus; (b) Tycho Brahe; (c) Kepler; (d) Galileo; (e) Newton; ii. Dalton and chemical combination; iii. The conservation of mass and energy; iv. Relativity; VI. 'DEDUCTION FROM PHENOMENA'-CASE HISTORIES; i. Kepler's determination of the orbit of |

Mars

ii. Harvey's discovery of the circulation of the blood; iii. Newton's experiments; iv. Lavoisier and combustion; v. Darwin's defence of the evolution hypothesis; vi. The discovery of the positron; vii. Findings; VII. SCIENTIFIC ADVANCE; i. Conceptual systems; ii. Recognition of observed data; iii. Articulation and proliferation of schemata; iv. The origins of change; v. The transition process; vi. Innovation and conservatism; vii. System and development; PART THREE: EPISTEMOLOGICAL; VIII. PERCEPTION; i. The epistemological crux; ii. Common views of perception; iii. Sense-data; iv. Critique and merits of sense-data theories; v. Achievement; vi. Discrepancy between 'data' and percept; vii. Schemata; viii. Context; ix. Innate and acquired schemata; x. Influence of past experience; xi. Interpretation; xii. Degrees of organization; xiii. Perception and science; IX. QUESTION AND ANSWER; i. Science and common sense; ii. Question and presupposition; iii. The origins of hypotheses; iv. Analogy and enumeration; v. Abduction; vi. Confirmation; vii. Note: What is meant by 'discovery'?; X. THE LOGIC OF CONSTRUCTION; i. The concept of structure; ii. Formalism, logic and psychology; iii. Systematic thinking; iv. Necessity and causality; v. Probability; vi. Induction and deduction; vii. Science as a system; XI. THE DIALECTIC OF PROGRESS; i. Comprehensiveness and consistency as marks of adequacy; ii. Objections and criticisms; iii. Science as a scale; iv. Dialectic; v. The unity of science; vi. Hierarchy; vii. Agreement of results; XII. SCIENCE AND TRUTH; i. Objectivity; ii. Science and reality; iii. Criticism and defence; iv. Knowledge and its object; v. Validity and progress; vi. Science and metaphysics; vii. Science and religion; INDEX

Sommario/riassunto

First published in 2002. Routledge is an imprint of Taylor & Francis, an informa company.