

1. Record Nr.	UNINA9910821375003321
Autore	Weisberg Herbert I. <1944->
Titolo	Willful ignorance : the mismeasure of uncertainty // Herbert I. Weisberg
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2014 ©2014
ISBN	1-118-83953-6 1-118-59441-X
Descrizione fisica	1 online resource (454 p.)
Classificazione	MAT029000MAT000000MED078000
Disciplina	001.4/22
Soggetti	Research - Statistical methods Probabilities Research - Methodology
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	WILLFUL IGNORANCE; CONTENTS; PREFACE; ACKNOWLEDGMENTS; CHAPTER 1 THE OPPOSITE OF CERTAINTY; TWO DEAD ENDS; ANALYTICAL ENGINES; WHAT IS PROBABILITY?; UNCERTAINTY; WILLFUL IGNORANCE; TOWARD A NEW SCIENCE; CHAPTER 2 A QUIET REVOLUTION; THINKING THE UNTHINKABLE; INVENTING PROBABILITY; STATISTICS; THE TAMING OF CHANCE; THE IGNORANCE FALLACY; THE DILEMMA OF SCIENCE; CHAPTER 3 A MATTER OF CHANCE; ORIGINS; Probability; Risky Business; Games, Odds, and Gambling; THE FAMOUS CORRESPONDENCE; Breaking the Symmetry Barrier; The Interrupted Game; WHAT DID NOT HAPPEN NEXT; AGAINST THE ODDS; A Fateful Journey Reasoning in Games of ChanceCHAPTER 4 HARDLY TOUCHED UPON; THE MATHEMATICS OF CHANCE; Juan Caramuel; Joseph Sauveur; Jacob Bernoulli; Thomas Storde; Two Scottish Refugees: John Arbuthnot and David Gregory; Isaac Newton; EMPIRICAL FREQUENCIES; John Graunt; William Petty; Three Dutch Masters: Huygens, Hudde, and De Witt; Jacob Bernoulli; Edmond Halley; A QUANTUM OF CERTAINTY; Why not Huygens or Leibniz?; What about Probabilism?; Bernoulli's Meditations; Across the Channel; CHAPTER 5 A MATHEMATICIAN OF BASEL;

PUBLICATION AT LAST; THE ART OF CONJECTURING; Part One: The Annotated Huygens
Part Two: Permutations and Combinations
Part Three: Games of Chance;
Part Four: Civil, Moral, and Economic Matters; A TRAGIC ENDING;
CHAPTER 6 A DEFECT OF CHARACTER; MAN WITHOUT A COUNTRY; An Itinerant Teacher; Turning Point; Expanding His Empire; Defending His Empire; A Mixed Legacy; A FRACTION OF CHANCES; De Mensura Sortis; De Moivre's Epiphany; CHAPTER 7 CLASSICAL PROBABILITY; REVOLUTIONARY REVERENDS; The Reverend Thomas Bayes; The Reverend Richard Price; The Famous Essay; Philosophical Significance; FROM CHANCES TO PROBABILITY; The French Newton; Laplace's Philosophy of Probability
The Probability of Causes
Insufficient Reason; A Coincidence?; CHAPTER 8 BABEL; THE GREAT UNRAVELING; PROBABILITY AS A RELATIVE FREQUENCY; The Meaning of Randomness; The Reference Class Problem; The Problem of the Single Case; PROBABILITY AS A LOGICAL RELATIONSHIP; Keynesian Probability; PROBABILITY AS A SUBJECTIVE ASSESSMENT; Another Cambridge Prodigy; Subjectivity Italian Style; Subjectivity and Statistics; PROBABILITY AS A PROPENSITY; An Unorthodox Thinker; A World of Propensities; CHAPTER 9 PROBABILITY AND REALITY; THE RAZOR'S EDGE; WHAT FISHER KNEW; WHAT REFERENCE CLASS?
The Monty Hall Problem
A POSTULATE OF IGNORANCE; Conditional Probabilities; Predicting Unique Events; Inside Information; The Two Envelope Problem; LAPLACE'S ERROR; CHAPTER 10 THE DECISION FACTORY; BEYOND MORAL CERTAINTY; Something Brewing; A Tale of Two Students; Contriving Ignorance; Statistical Significance; DECISIONS, DECISIONS; An Odd Couple; From Knowledge to Decisions; Rage Against the Machine; The Bayesian Revival; MACHINE-MADE KNOWLEDGE; CHAPTER 11 THE LOTTERY IN SCIENCE; SCIENTIFIC PROGRESS; Early Childhood Education; Aspirin for Prevention; FOOLED BY CAUSALITY; Heuristics and Biases
Are We Really So Dumb?

Sommario/riassunto

An original account of willful ignorance and how this principle relates to modern probability and statistical methods. Through a series of colorful stories about great thinkers and the problems they chose to solve, the author traces the historical evolution of probability and explains how statistical methods have helped to propel scientific research. However, the past success of statistics has depended on vast, deliberate simplifications amounting to willful ignorance, and this very success now threatens future advances in medicine, the social sciences, and other fields. Limitations of exist
