“As richly described in the various chapters of this book, we see that clinics can act as a window to the functioning of law and the legal system. Clinics allow students and faculty to see how laws and the legal system are functioning for groups of people who otherwise likely would not be a part of the common experience of professors and their students: poor people generally, migrants and refugees, women and children exploited by trafficking, people with disabilities, ethnic minorities, prisoners, and so on. Legal systems the world over tend to give less care and attention to the problems of the poor and other disempowered groups, and such people usually lack access to well-educated legal advocates to help them fight to make the legal system work for them. Through clinic cases, students and faculty see the day-to-day lives of people marginalized by the society, see how the law affects and influences their lives, and see how it serves or fails to serve them. For law professors involved in clinical education, such as the authors of this book, heightened awareness of the law’s operation for poor people adds another important perspective to the subjects of their research and work as commentators on the law. Students can also be inspired to select topics for research papers, master or PhD theses by exposure to problems in the law and legal system as it functions for their clients.”

(Dall’introduzione)From gaming consoles to smartphones, video games are everywhere today, including those set in historical times and particularly in the ancient world. This volume explores the varied depictions of the ancient world in video games and demonstrates the potential challenges of games for scholars as well as the applications of game engines for educational and academic purposes. With successful series such as “Assassin’s Creed” or “Civilization” selling millions of copies, video games rival even television and cinema in their role in shaping younger audiences’ perceptions of the past. Yet classical scholarship, though embracing other popular media as areas of research, has so far largely ignored video games as a vehicle of classical reception. This collection of essays fills this gap with a dedicated study of receptions, remediations and representations of Classical Antiquity across all electronic gaming platforms and genres. It presents cutting-edge research in classics and classical receptions, game studies and archaeogaming, adopting different perspectives and combining
papers from scholars, gamers, game developers and historical consultants. In doing so, it
delivers the first state-of-the-art account of both the wide array of 'ancient' video games, as
well as the challenges and rewards of this new and exciting field. This book features fourteen
original essays that critically engage the philosophy of Richard Rorty, with an emphasis on his
ethics, epistemology, and politics. Inspired by James’ and Dewey’s pragmatism, Rorty urged
us to rethink the role of science and truth with a liberal-democratic vision of politics. In doing
so, he criticized philosophy as a sheer scholastic endeavor and put it back in touch with our
most pressing cultural and human needs. The essays in this volume employ the conceptual
tools and argumentative techniques of analytic philosophy and pragmatism and demonstrate
the relevance of Rorty’s thought to the most urgent questions of our time. They touch on a
number of topics, including but not limited to structural injustice, rule-following, Black feminist
philosophy, legal pragmatism, moral progress, relativism, and skepticism. This book will be of
interest to a wide range of scholars across disciplines who are engaging with the work of
Richard Rorty. The advancement of a scientific discipline depends not only on the "big heroes"
of a discipline, but also on a community’s ability to reflect on what has been done in the past
and what should be done in the future. This volume combines perspectives on both. It
celebrates the merits of Michael Otte as one of the most important founding fathers of
mathematics education by bringing together all the new and fascinating perspectives created
through his career as a bridge builder in the field of interdisciplinary research and cooperation.
The perspectives elaborated here are for the greatest part motivated by the impressing variety
of Otte’s thoughts; however, the idea is not to look back, but to find out where the research
agenda might lead us in the future. This volume provides new sources of knowledge based on
Michael Otte’s fundamental insight that understanding the problems of mathematics education
– how to teach, how to learn, how to communicate, how to do, and how to represent
mathematics – depends on means, mainly philosophical and semiotic, that have to be created
first of all, and to be reflected from the perspectives of a multitude of diverse disciplines.

ALAN J. BISHOP
Monash University, Clayton, Victoria, Australia
RATIONALE Mathematics Education is becoming a well-documented field with many books, journals and international
conferences focusing on a variety of aspects relating to theory, research and practice. That
documentation also reflects the fact that the field has expanded enormously in the last twenty
years. At the 8th International Congress on Mathematics Education (ICME) in Seville, Spain,
for example, there were 26 specialist Working Groups and 26 specialist Topic Groups, as well
as a host of other group activities. In 1950 the ‘Commission Internationale pour l’Etude et l’
Amélioration de l’Enseignement des Mathématiques’ (CIEAEM) was formed and twenty years
ago another active group, the ‘International Group for the Psychology of Mathematics
Education’ (PME), began at the third ICME at Karlsruhe in 1976. Since then several other
specialist groups have been formed, and are also active through regular conferences and
publications, as documented in Edward Jacobsen's Chapter 34 in this volume. This book brings
together empirical research and conceptual work on textbooks and education media from 13
countries and 17 disciplines. Along with textbook production, usage, and development, it also
explores the interconnectedness of (educational) policy and teaching and learning materials.
Further, the book offers insights into regional and local discourses (e.g. specific theories of
Portuguese- and Spanish-speaking countries as well as Nordic countries, contrasting their
theories with international literature), practices, and solutions with regard to teaching selected
subjects at the pre-primary, primary, secondary, and tertiary level. This book also discusses
the specific combinations of subjects (e.g. Physics, Biology, Geography, Swedish, English) and
their subject-specific education (e.g. Physics Education or Didactics). Lastly, it examines the
work of a number of early-career researchers, giving them a voice and bringing in fresh ideas
currently being developed in various countries around the globe. This proceedings volume will
appeal to publishers, subject educators in primary, secondary, and tertiary education, and
academic researchers from the fields of textbooks, educational media and subject-specific education. Its international authorship and explicit focus on subject-specific particularities of educational media provide a unique and comprehensive overview. The utilization of media has proven to be a beneficial instructional method in learning environments. These tools are particularly useful for teacher training, promoting better reflection on current practices. Integrating Video into Pre-Service and In-Service Teaching Training provides a comprehensive overview on the application of class video recordings to encourage self-observation of personal teaching methods and improve everyday classroom habits. Highlighting concepts relating to professionalism, didactics, and technological techniques, this book is a pivotal reference source for researchers, educators, practitioners, and students. This groundbreaking book investigates how the learning and teaching of mathematics can be improved through integrating the history of mathematics into all aspects of mathematics education: lessons, homework, texts, lectures, projects, assessment, and curricula. It draws upon evidence from the experience of teachers as well as national curricula, textbooks, teacher education practices, and research perspectives across the world. It includes a 300-item annotated bibliography of recent work in the field in eight languages. A scholar of Hellenistic and Prussian history, Droysen developed a historical theory that at the time was unprecedented in range and depth, and which remains to the present day a valuable key for understanding history as both an idea and a professional practice. Arthur Alfaix Assis interprets Droysen's theoretical project as an attempt to redefine the function of historiography within the context of a rising criticism of exemplar theories of history, and focuses on Droysen's claim that the goal underlying historical writing and reading should be the development of the subjective capacity to think historically. In addition, Assis examines the connections and disconnections between Droysen's theory of historical thinking, his practice of historical thought, and his political activism. Ultimately, Assis not only shows how Droysen helped reinvent the relationship between historical knowledge and human agency, but also traces some of the contradictions and limitations inherent to that project. The Routledge International Companion to Education addresses the key issues underpinning the rethinking and restructuring of education at the beginning of the new millennium. The volume contains over fifty major contributions exploring a wide range of issues, including: * philosophy of education * the economics and resourcing of education * testing and assessment: current issues and future prospects * standards * multiculturalism * anti-racism * computers in classrooms * mother tongue education * civics and moral education. Each chapter gives a contemporary account of developments in the field, and looks to the future and the directions that new activity and inquiry are likely to take. All the chapters are written from an international perspective. Current interest in semiotics is undoubtedly related to our increasing awareness that our manners of thinking and acting in our world are deeply indebted to a variety of signs and sign systems (language included) that surround us. Abstracts. The book provides strong evidence that research on the cognitive processes from arithmetic thought to algebraic thought should take into consideration the socio-cultural context. It is an important contribution to the literature on linguistic structure in comparative studies related to Chinese student mathematics learning. This book not only makes a great contribution to research in mathematics education, the findings of this study also addressed insightful approaches and thoughts of understanding the development of algebraic thinking in cultural contexts for classroom teachers. Using written Chinese language from different theoretical references provided wonderful approaches for understanding student algebra cognitive development in a different way and calls educators for to pay special attention to an epistemological and linguistic view of algebraic development. The findings inform classroom teachers that the cultural context plays an important role in student learning mathematics. A typical analysis of the cognitive dimension involved in some in the historical and cultural contexts is a great resource for classroom teachers. I really enjoyed reading this book and
learned a lot from its compelling analysis. Shuhua An, Associate Professor and Director of Graduate Program in Mathematics Education, California State University, Long Beach

This book confronts the issue of how young people can find a way into the world of algebra. It represents multiple perspectives which include an analysis of situations in which algebra is an efficient problem-solving tool, the use of computer-based technologies, and a consideration of the historical evolution of algebra. The book emphasizes the situated nature of algebraic activity as opposed to being concerned with identifying students' conceptions in isolation from problem-solving activity.

Nations worldwide consider education an important tool for economic and social development, and the use of innovative strategies to prepare students for the acquisition of knowledge and skills is currently considered the most effective strategy for nurturing engaged, informed learners. In the last decade especially, European countries have promoted a series of revisions to their curricula and in the ways teachers are trained to put these into practice. Updating curriculum contents, pedagogical facilities (for example, computers in schools), and teaching and learning strategies should be seen as a routine task, since social and pedagogical needs change over time. Nevertheless, educational institutions and actors (educational departments, schools, teachers, and even students) normally tend to be committed to traditional practices. As a result of this resistance to change within educational systems, implementing educational innovation is a big challenge. The authors of the present volume have been involved with curriculum development since 2003. This work is an opportunity to present the results of more than a decade of research into experimental, inventive approaches to science education. Most chapters concern innovative strategies for the teaching and learning of new contents, as well as methods for learning to teach them at the pre-university school level. The research is focused on understanding the pedagogical issues around the process of innovation, and the findings are grounded in analyses of the limits and possibilities of teachers’ and students’ practices in schools.

The aim of this book is to support and inspire teachers to contribute to much-needed processes of sustainable development and to develop teaching practices and professional identities that allow them to cope with the specificity of sustainability issues and, in particular, with the teaching challenges related to the ethical and political dimension of environmental and sustainability education. Bringing together recent scholarship on the topic, this book translates state-of-the-art academic research into teaching models, methods and tools. Starting with an outline of the challenge of sustainability, it offers insights and models for understanding the interesting yet ambiguous concept of ‘sustainable development’ and the complex process of transforming society in a more sustainable direction (Part I). It then goes on to provide a guide to preparing courses and lessons as well as tools for reflection about teaching practices and the multiplicity of approaches to addressing ethical and political challenges in sustainable development teaching (Part II). Finally, the book offers useful conceptual frameworks, models and typologies about the concrete design and implementation of sustainable development teaching (Part III).

This book will be essential reading for students of education, as well as teachers in compulsory and higher education and sustainability education researchers. This book offers a comprehensive overview of research at interface between History, Philosophy and Sociology of Science (HPSS) and Science Teaching in Ibero-America. It contributes to research on contextualization of science for students, teachers and researchers, and explains how to use different episodes of history of science or different themes of philosophy of science in regular science classes through diverse pedagogical approaches. The chapters in this book discuss a wide range of topics under different methodological, epistemological and didactic approaches, reflecting the richness of research developed in Spanish and Portuguese speaking countries, Latin America, Spain and Portugal. The book contains chapters about historical events, topics of philosophy and sociology of science, nature of science, applications of HPSS in the classroom, instructional materials for students and teacher training courses and curriculum.

Sarah H.
Beckjord's *Territories of History* explores the vigorous but largely unacknowledged spirit of reflection, debate, and experimentation present in foundational Spanish American writing. In historical works by writers such as Gonzalo Fernández de Oviedo, Bartolomé de Las Casas, and Bernal Díaz del Castillo, Beckjord argues, the authors were not only informed by the spirit of inquiry present in the humanist tradition but also drew heavily from their encounters with New World peoples. More specifically, their attempts to distinguish superstition and magic from science and religion in the New World significantly influenced the aforementioned chroniclers, who increasingly directed their insights away from the description of native peoples and toward a reflection on the nature of truth, rhetoric, and fiction in writing history. Due to a convergence of often contradictory information from a variety of sources—eyewitness accounts, historiography, imaginative literature, as well as broader philosophical and theological influences—categorizing historical texts from this period poses no easy task, but Beckjord sifts through the information in an effective, logical manner. At the heart of Beckjord’s study, though, is a fundamental philosophical problem: the slippery nature of truth—especially when dictated by stories. *Territories of History* engages both a body of emerging scholarship on early modern epistemology and empiricism and recent developments in narrative theory to illuminate the importance of these colonial authors’ critical insights. In highlighting the parallels between the sixteenth-century debates and poststructuralist approaches to the study of history, Beckjord uncovers an important legacy of the Hispanic intellectual tradition and updates the study of colonial historiography in view of recent discussions of narrative theory. This book examines the theater of narration, an Italian performance genre and aesthetic that revisits historical events of national importance from local perspectives, drawing on the rich relationship between personal experiences and historical accounts. Incorporating original research from the private archives of leading narrators—artists who write and perform their work—Juliet Guzzetta argues that the practice teaches audiences how ordinary people aren’t simply witnesses to history but participants in its creation. The theater of narration emerged in Italy during the labor and student protests, domestic terrorism, and social progress of the 1970s. Developing Dario Fo and Franca Rame’s style of political theater, influenced by Jerzy Grotowski and Bertolt Brecht, and following in the freewheeling actor-author traditions of the commedia dell’arte, narrators created a new form of popular theater that grew in prominence in the 1990s and continues to gain recognition. Guzzetta traces the history of the theater of narration, contextualizing its origins—both political and intellectual—and centers the contributions of Teatro Settimo, a performance group overlooked in previous studies. She also examines the genre’s experiments in television and media. The first full-length book in English on the subject, *The Theater of Narration* leverages close readings and a wealth of primary sources to examine the techniques used by narrators to remake history—a process that reveals the ways in which history itself is a theater of narration. Collected and translated by John B. Thompson, this collection of essays by Paul Ricoeur includes many that had never appeared in English before the volume’s publication in 1981. As comprehensive as it is illuminating, this lucid introduction to Ricoeur’s prolific contributions to sociological theory features his more recent writings on the history of hermeneutics, its central themes and issues, his own constructive position and its implications for sociology, psychoanalysis and history. Presented in a fresh twenty-first-century series livery, and including a specially commissioned preface written by Charles Taylor, illuminating its enduring importance and relevance to philosophical enquiry, this classic work has been revived for a new generation of readers. From the contents: Naturalistic epistemology, murder and suicide? But what about the promises! (Ton Derksen). - Naturalism and rationality (Christopher Hookway). - Quine’s hypothetical theory of language learning: a comparison of different conceptual schemes of their logic (Mia Gosselin). - Quine and innate similarity spaces (Jaap van Brakel). - Quine and Davidson on the structure of empirical knowledge (Dirk Koppelberg). - Empathy and charity (Eva Picardi). - Quine:
indeterminacy, 'robust realism', and truth (Sandra Laugier). - Quine and Putnam on conceptual relativity and reference: theft or honest toil? (Roger Vergauwen). This book casts new light on the process that in the sixteenth and seventeenth centuries led to a profound transformation in the study of nature with the emergence of mechanistic philosophy, the new mixed mathematics, and the establishment of the experimental approach. It is argued that modern European science originated from Hellenistic mathematics not so much because of rediscovery of the latter but rather because its "applied" components, namely mechanics, optics, harmonics, and astronomy, and their methodologies continued to be transmitted throughout the Middle Ages without serious interruption. Furthermore, it is proposed that these "applied" components played a role in their entirety; thus, for example, "new" mechanics derived not only from "old" mechanics but also from harmonics, optics, and astronomy. Unlike other texts on the subject, the role of mathematicians is stressed over that of philosophers of nature and the focus is particularly on epistemological aspects. In exploring Galilean and post-Galilean epistemology, attention is paid to the contributions of Galileo's disciples and also the impact of his enemies. The book will appeal to both historians of science and scientists. This book proposes a method to evaluate the work of teachers acting in a very specific educational context: graduate programs at higher education institutions. There are many publications on the field of measurement and evaluation of teaching practices, but these studies are usually conducted at the undergraduate level and ignore the nuances of teaching practices at the graduate level. Should professors demonstrate the same skills when they teach in undergraduate programs as they do when they teach in graduate programs? Is it appropriate to use the same assessment tools both at the undergraduate and the graduate levels? Do the teaching practices evolve the same way at the graduate and undergraduate levels? The book intends to answer these questions by introducing a methodological approach to find the relevant variables that are the foundation of professional practices at the graduate level as determined by the scientific community and through the analysis of the stakeholders' perceptions. The proposed methodological approach combines quantitative and qualitative research techniques to identify and explain, within a mixed-method framework, the most important factors that lead to teaching quality at graduate level. Therefore, How to Evaluate Teaching Practices in Graduate Practices will be a valuable resource for students, university professors and educational administrators interested in quality assurance processes in higher education institutions. This handbook introduces concepts, ideas and methods of sustainability research based on real examples. It is divided into four sections. One part deals with theoretical aspects of sustainability and refers to theoretical approaches to sustainability research. Another section elaborates on more practical approaches to sustainability research, offering views and perspectives from various researchers, illustrating how regulations, laws and political frameworks influence sustainability. A third part treats education for sustainability and presents research and practical projects, showcasing how sustainability research may focus in formal and non-formal education. The final section draws some conclusions based on the body of experiences and knowledge gathered by the authors. This handbook will be of great use to educators, scientists, researchers, politicians, environment activists, teachers and others interested in sustainability and in the implementation of results of sustainability research. This state-of-the-art Handbook brings together important mathematics education research that makes a difference in both theory and practice--research that: anticipates problems and needed knowledge before they become impediments to progress; interprets future-oriented problems into researchable issues; presents the implications of research and theory development in forms that are useful to practitioners and policymakers; and facilitates the development of research communities to focus on neglected priorities or strategic opportunities. The volume represents a genuine attempt by contributors from around the world to advance the discipline, rather than simply review what has been done and what exists. The
Handbook was developed in response to a number of major global catalysts for change, including the impact of national and international mathematics comparative assessment studies; the social, cultural, economic, and political influences on mathematics education and research; the influence of progressively sophisticated and available technology; and the increasing globalization of mathematics education and research. From these catalysts have emerged specific priority themes and issues for mathematics education research in the 21st century. Three key themes were identified for attention in this volume: life-long democratic access to powerful mathematical ideas; advances in research methodologies; and influences of advanced technologies. Each of these themes is examined in terms of learners, teachers, and learning contexts, with theory development as an important component of all these aspects. Dynamic and forward looking, the Handbook of International Research in Mathematics Education is distinguished by its focus on new and emerging theoretical models, perspectives, and research methodologies; its uniformly high standard of scholarship; and its emphasis on the international nature of mathematics education research. It is an essential volume for all researchers, professionals, and students interested in mathematics education research in particular and, more generally, in international developments and future directions in the broad field of educational research. This book rethinks the relations between reasoning and revelation and, therefore, the nature of philosophy and religion in archaic Greece. This collection of essays investigates histories in the ancient world and the extent to which the producers and consumers of those histories believed them to be true. Ancient Greek historiographers repeatedly stressed the importance of truth to history; yet they also purported to believe in myth, distorted facts for nationalistic or moralizing purposes, and omitted events that modern audiences might consider crucial to a truthful account of the past. Truth and History in the Ancient World explores a pluralistic concept of truth – one in which different versions of the same historical event can all be true – or different kinds of truths and modes of belief are contingent on culture. Beginning with comparisons between historiography and aspects of belief in Greek tragedy, chapters include discussions of historiography through the works of Herodotus, Xenophon, and Ktesias, as well as Hellenistic and later historiography, material culture in Vitruvius, and Lucian’s satire. Rather than investigate whether historiography incorporates elements of poetic, rhetorical, or narrative techniques to shape historical accounts, or whether cultural memory is flexible or manipulated, this volume examines pluralities of truth and belief within the ancient world – and consequences for our understanding of culture, ancient or otherwise. Didactics of Mathematics as a Scientific Discipline describes the state of the art in a new branch of science. Starting from a general perspective on the didactics of mathematics, the 30 original contributions to the book, drawn from 10 different countries, go on to identify certain subdisciplines and suggest an overall structure or ‘topology’ of the field. The book is divided into eight sections: (1) Preparing Mathematics for Students; (2) Teacher Education and Research on Teaching; (3) Interaction in the Classroom; (4) Technology and Mathematics Education; (5) Psychology of Mathematical Thinking; (6) Differential Didactics; (7) History and Epistemology of Mathematics and Mathematics Education; (8) Cultural Framing of Teaching and Learning Mathematics. Didactics of Mathematics as a Scientific Discipline is required reading for all researchers into the didactics of mathematics, and contains surveys and a variety of stimulating reflections which make it extremely useful for mathematics educators and teacher trainers interested in the theory of their practice. Future and practising teachers of mathematics will find much to interest them in relation to their daily work, especially as it relates to the teaching of different age groups and ability ranges. The book is also recommended to researchers in neighbouring disciplines, such as mathematics itself, general education, educational psychology and cognitive science. Golden Age departures in historiography and theory of history in some ways prepared the ground for modern historical methods and ideas about historical factuality. At the
same time, they fed into the period’s own "aesthetic-historical culture" which amalgamated fact and fiction in ways modern historians would consider counterfactual: a culture where imaginative historical prose, poetry and drama self-consciously rivalled the accounts of royal chroniclers and the dispatches of diplomatic envoys; a culture dominated by a notion of truth in which skilful construction of the argument and exemplarity took precedence over factual accuracy. Literature and Historiography in the Spanish Golden Age: The Poetics of History investigates this grey area backdrop of modern ideas about history, delving into a variety of Golden Age aesthetic-historical works which cannot be satisfactorily described as either works of literature or works of historiography but which belong in between these later strictly separate categories. This book explores new trends and developments in mathematics education research related to proof and proving, the implications of these trends and developments for theory and practice, and directions for future research. With contributions from researchers working in twelve different countries, the book brings also an international perspective to the discussion and debate of the state of the art in this important area. The book is organized around the following four themes, which reflect the breadth of issues addressed in the book: • Theme 1: Epistemological issues related to proof and proving; • Theme 2: Classroom-based issues related to proof and proving; • Theme 3: Cognitive and curricular issues related to proof and proving; and • Theme 4: Issues related to the use of examples in proof and proving. Under each theme there are four main chapters and a concluding chapter offering a commentary on the theme overall. This inaugural handbook documents the distinctive research field that utilizes history and philosophy in investigation of theoretical, curricular and pedagogical issues in the teaching of science and mathematics. It is contributed to by 130 researchers from 30 countries; it provides a logically structured, fully referenced guide to the ways in which science and mathematics education is, informed by the history and philosophy of these disciplines, as well as by the philosophy of education more generally. The first handbook to cover the field, it lays down a much-needed marker of progress to date and provides a platform for informed and coherent future analysis and research of the subject. The publication comes at a time of heightened worldwide concern over the standard of science and mathematics education, attended by fierce debate over how best to reform curricula and enliven student engagement in the subjects. There is a growing recognition among educators and policy makers that the learning of science must dovetail with learning about science; this handbook is uniquely positioned as a locus for the discussion. The handbook features sections on pedagogical, theoretical, national, and biographical research, setting the literature of each tradition in its historical context. It reminds readers at a crucial juncture that there has been a long and rich tradition of historical and philosophical engagements with science and mathematics teaching, and that lessons can be learnt from these engagements for the resolution of current theoretical, curricular and pedagogical questions that face teachers and administrators. Science educators will be grateful for this unique, encyclopaedic handbook, Gerald Holton, Physics Department, Harvard University This handbook gathers the fruits of over thirty years’ research by a growing international and cosmopolitan community Fabio Bevilacqua, Physics Department, University of Pavia This book includes 18 peer-reviewed papers from nine countries, originally presented in a shorter form at TSG 25 The Role of History of Mathematics in Mathematics Education, as part of ICME-13 during. It also features an introductory chapter, by its co-editors, on the structure and main points of the book with an outline of recent developments in exploring the role of history and epistemology in mathematics education. It serves as a valuable contribution in this domain, by making reports on recent developments in this field available to the international educational community, with a special focus on relevant research results since 2000. The 18 chapters of the book are divided into five interrelated parts that underlie the central issues of research in this domain: 1. Theoretical and conceptual frameworks for integrating history and epistemology in mathematics in mathematics education;
2. Courses and didactical material: Design, implementation and evaluation; 3. Empirical investigations on implementing history and epistemology in mathematics education; 4. Original historical sources in teaching and learning of and about mathematics; 5. History and epistemology of mathematics: Interdisciplinary teaching and sociocultural aspects. This book covers all levels of education, from primary school to tertiary education, with a particular focus on teacher education. Additionally, each chapter refers to and/or is based on empirical research, in order to support, illuminate, clarify and evaluate key issues, main questions, and conjectured theses raised by the authors or in the literature on the basis of historical-epistemological or didactical-cognitive arguments.

Lexicon Grammaticorum is a biographical and bibliographical reference work on the history of all the world's traditions of linguistics. Each article consists of a short definition, details of the life, work and influence of the subject and a primary and secondary bibliography. The authors include some of the most renowned linguistic scholars alive today. For the second edition, twenty co-editors were commissioned to propose articles and authors for their areas of expertise. Thus this edition contains some 500 new articles by more than 400 authors from 25 countries in addition to the completely revised 1,500 articles from the first edition. Attention has been paid to making the articles more reader-friendly, in particular by resolving abbreviations in the textual sections. Key features: essential reference book for linguists worldwide 500 new articles over 400 contributors of 25 countries

Case studies fascinate because they link individual instances to general patterns and knowledge to action without denying the priority of individual situations over the generalizations derived from them. In this volume, an international group of senior scholars comes together to consider the use of cases to produce empirical knowledge in premodern China. They trace the process by which the project of thinking with cases acquired a systematic and public character in the ninth century CE and after. Premodern Chinese experts on medicine and law circulated printed case collections to demonstrate efficacy or claim validity for their judgments. They were joined by authors of religious and philosophical texts. The rhetorical strategies and forms of argument used by all of these writers were allied with historical narratives, exemplary biographies, and case examples composed as aids to imperial statecraft. The innovative and productive explorations gathered here present a coherent set of interlocking arguments that will be of interest to comparativists as well as specialists on premodern East Asia. For China scholars, they examine the interaction of different fields of learning in the late imperial period, the relationship of evidential reasoning and literary forms, and the philosophical frameworks that linked knowledge to experience and action. For comparativists, the essays bring China into a global conversation about the methodologies of the human sciences.


This volume may be of interest for all those who wish that philosophy had a scientific character. As an adherent of the Polish Lvov-Warsaw Philosophical School, the author of this collection of papers endeavours to clarify some basic notions of epistemology, ontology and psychology of cognitive acts, such as judgment, existence, being etc. In his investigations he refrains from unnecessary rejection of common-sense knowledge but at the same time searches for suitable patterns in contemporary sciences. Regarding formal logic as a fundamental tool for the precise expression and justification of thoughts, the author tries to clear logic from ontological commitments, shows how to construct logic of norms and how to use safely different definitions in research works. The book presents a new conception of antinomies and an innovatory approach to realistic epistemology. Moreover, some applications of logical methods are illustrated by examples of semantical analyses of the general notion of similarity and the biological concept of homology. Statistical implicational analysis is a data analysis method created by Régis Gras almost thirty years ago which has a significant impact on a variety of areas ranging from pedagogical and psychological research to data mining.

Statistical
implicative analysis (SIA) provides a framework for evaluating the strength of implications; such implications are formed through common knowledge acquisition techniques in any learning process, human or artificial. This new concept has developed into a unifying methodology, and has generated a powerful convergence of thought between mathematicians, statisticians, psychologists, specialists in pedagogy and last, but not least, computer scientists specialized in data mining. This volume collects significant research contributions of several rather distinct disciplines that benefit from SIA. Contributions range from psychological and pedagogical research, bioinformatics, knowledge management, and data mining. This book, addressing mathematics educators, teacher-trainers and teachers, is published as a contribution to the endeavour of renewing the teaching of proof (and theorems) on the basis of historical-epistemological, cognitive and didactical considerations. Copyright code: 9ef8ed8f9dfd87e130f0bc17b6c9b8b9