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Nota di contenuto	Preface by Patricia Radelet-de Grave -- Acknowledgments -- Remarks for the Reader -- Introduction -- PART I – Biographical Sketches & Science in Context -- 1 Niccolò Tartaglia and the Renaissance Society between Science and Technique. Niccolò Fontana called Tartaglia -- 1.1. Biographical and Scientific Sketches -- 1.2.Tartaglia’s Conceptual Stream in the Renaissance -- 1.3. Physics and Architecture: On Ballistics & Fortifications -- 1.4. On the Opera Archimedis and Archimedis de insidentibus aquae -- 1.5. Contents, Former Pupils and Philological Notes -- 2. Ancient and Modern Statics in the Renaissance. The Background -- 2.1.The scientia de ponderibus in the Middle Ages -- 2.2. Revival during the Age of Humanism -- 2.3. Tartaglia’s Legacy. A Transition between Science of Weights and Modern Statics -- PART II – History & Historical Epistemology Analyses -- 3The Analysis of Books VII and VIII of Quesiti et inventioni diverse -- A Historical Epistemology Outline on Early Statics in the Books VII and VIII -- 3.1. The Analysis of

Book VII (1554) -- 3.2.The Analysis of Book VIII (1554) -- PART III – Translations & Transcriptions 4. General Considerations -- 4.1. The Quesiti et inventioni diverse (1554) -- 4.2. Philological Notes on Iordani opusculum de ponderositate (1565) -- 4.3. Book VII of Quesiti et inventioni diverse (1554) -- 4.4. Book VIII of Quesiti et inventioni diverse (1554) -- 4.5. The Italian Critical Transcriptions -- 4.6. The Iordani opusculum de ponderositate (1565) -- PART IV – Circulation of Knowledge & Conclusion -- 5 Foreign Editions of Quesiti et invention diverse. General Considerations -- 5.1. Quesiti Foreign Editions -- 5.2. Bibliographical Notes -- Conclusion -- 6 Conclusion -- Concluding Remarks -- References -- Microfilm Tartalea -- Main Quesiti Accounts -- Index.

Sommario/riassunto

This book presents a historical and scientific analysis as historical epistemology of the science of weights and mechanics in the sixteenth century, particularly as developed by Tartaglia in his Quesiti et inventioni diverse, Book VII and Book VIII (1546; 1554). In the early 16th century mechanics was concerned mainly with what is now called statics and was referred to as the Scientia de ponderibus, generally pursued by two very different approaches. The first was usually referred to as Aristotelian, where the equilibrium of bodies was set as a balance of opposite tendencies to motion. The second, usually referred to as Archimedean, identified statics with centrobarica, the theory of centres of gravity based on symmetry considerations. In between the two traditions the Italian scholar Niccolò Fontana, better known as Tartaglia (1500?–1557), wrote the treatise Quesiti et inventioni diverse (1546). This volume consists of three main parts. In the first, a historical excursus regarding Tartaglia’s lifetime, his scientific production and the Scientia de ponderibus in the Arabic-Islamic culture, and from the Middle Ages to the Renaissance, is presented. Secondly, all the propositions of Books VII and VIII, by relating them with the Problemata mechanica by the Aristotelian school and Iordani opvsculvm de ponderositate by Jordanus de Nemore are examined within the history and historical epistemology of science. The last part is relative to the original texts and critical transcriptions into Italian and Latin and an English translation. This work gathers and re-evaluates the current thinking on this subject. It brings together contributions from two distinguished experts in the history and historical epistemology of science, within the fields of physics, mathematics and engineering. It also gives much-needed insight into the subject from historical and scientific points of view. The volume composition makes for absorbing reading for historians, epistemologists, philosophers and scientists.