
Euclid Vindicated from Every Blemish

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Gerolamo Saccheri

Euclid Vindicated from Every Blemish

Edited and Annotated by Vincenzo De Risi
Translated by G.B. Halsted and L. Allegri

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Foreword to the English Edition

This book is the English translation of my annotated edition of Saccheri's *Euclides vindicatus*, published in Italian for the 'Edizioni della Normale' in 2011. With respect to the Italian edition, I have corrected some minor mistakes and typos, added some bibliographical references and deleted those that may have no interest for the English-speaking reader.

I have not re-translated Saccheri into English (a difficult task that awaits a native English-speaking scholar), and have based the present edition on Halsted's classical translation which first appeared in volume form in 1920 and was subsequently reprinted several times. Halsted's translation received some favorable reviews by R.C. Archibald and A. Emch ("Amer. Math. Monthly", 1921; "Bull. Amer. Math. Soc.", 1922) and harsh criticisms by T. Heath ("Nature", 1922). It seems to me fairly good, and Halsted's geometrical skills allowed him to produce a text that contains no significant mathematical misunderstandings. Today his language may sound old-fashioned, but it mimics Saccheri's own baroque and cumbersome Latin very well, which is almost impossible to translate into modern, elegant prose. Nonetheless, I have taken the liberty of modifying and correcting Halsted's version at some places. Besides correcting a few minor mistakes noticed by Heath, and a pair of mathematical imprecisions, my changes mostly regard the choice of terminology, some of which I have justified in my commentary. The most obvious modification is in the title of Saccheri's work whose translation varies largely depending on the translator or interpreter in question. In the *Introduction*, I have tried to justify the preservation of Euclid 'vindicated' rather than the more common 'emended' or 'corrected' (or Halsted's 'freed'), which do not seem to reflect the author's intentions. I prefer the term 'blemish' to other more abstract terms (such as 'error' or 'flaw'), given that Savile's original text makes use of an explicit corporal metaphor ("two blemishes, two moles in the most beautiful body of geometry").

Halsted's translation, in any case, covered only the First Book of *Euclid Vindicated*. A complete English translation of the Second Book is to be found in the doctoral dissertation of Linda Allegri (Columbia University, 1960) which was intended to complement Halsted's work. I publish Allegri's text here which, however, required a larger number of corrections and revisions. To my knowledge, this is the first complete English edition of Saccheri's masterwork.

My *Introduction* and *Notes* have been translated by Marco Santi and Caterina Benincasa, whose painstaking efforts deserve my deepest gratitude. I also thank Rebecca Rothfeld and Chiara Fabbrizi for the editing of the texts.

I would also like to express my thanks to Massimo Mugnai, Mariano Giaquinta and Paolo Freguglia for their invaluable help with the original Italian edition; to Massimo Mugnai and Massimo Girondino for providing me with their edition of Saccheri's *Logica* when it was still in proofs; to Marvin J. Greenberg, Victor Pambuccian, and Roshdi Rashed for their important suggestions on how to improve the English edition; to the many scholars who commented on my talks on Saccheri in several workshops organized by Arianna Betti, Michael Detlefsen and Roshdi Rashed.

I am grateful to my colleagues and friends at the Max Planck Institute for the History of Science for their support and advice, to the Library of the Institute for providing me with a digitalization of the Latin text of Saccheri and to the Max Planck Society for financial support.

Finally, and most of all, I thank Jürgen Jost for making this edition possible and for proposing that I publish it in this Series. I also thank the 'Edizioni della Normale' for allowing this translation. The present volume will soon be complemented (in the same Series) by a similar English edition of Lambert's *Theorie der Parallellinien*.

Berlin, January 2014

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