

POPULAR SCIENCE SUMMARY OF THE PROJECT

‘Three jealous husbands’ is the title of a mathematical puzzle based on logic and simple calculations that even today is still being solved in schools and found in riddle collections. There are also modern versions, such as ‘A couple of teenagers in love running away from home’.

Where do these puzzles come from and who invented them? The answer to that question is a task for the history of mathematics but it is impossible to recreate history without **publishing sources**. And that is exactly the aim of the project: **to publish and lay down one of the most important Renaissance sources of so-called “recreational mathematics”**, that is, not scholarly or academic ones but those that used mathematics as entertainment. Even in the most ancient of civilizations, people used to amuse themselves with mathematics and they came up with various supposed paradoxes and clever puzzles. Modern mathematical riddles have Renaissance roots. In Italy, at the beginning of the 16th century, two significant collections of puzzles were created: *De viribus quantitatis*, by Luca Pacioli (published in 1997 and in facsimile form in 2009) and *Giuochi mathematici* dedicated to Giuliano de Medici, Duke of Nemours, and written by the rather unknown author Piero di Nicolò d’Antonio da Filicaia around 1510-1513. The latter has not yet been published.

Later, prominent Renaissance Italian mathematicians—Tartaglia and Cardano—revived the theme of mathematical puzzles and a collection of puzzles was published in 1612 by Claude-Gaspard Bachet de Méziriac of France. He largely drew inspiration from his Italian predecessors (as demonstrated by Agostini in 1924). From there, it was only one step to contemporary riddles and mathematical conundrums.

The treatise we will publish was written in a vernacular language (Italian) and not in Latin, which suggests that its prospective readers were not supposed to be university scholars. Also, the manuscript of the treatise, now kept in Jagiellonian Library (manuscript Ital. Quart. 48 from the Berlin collection, or the so-called *Berlinka*) indicates its destination—beautiful binding, an embroidered coat of arms of Medici, a decoration on the title page with motifs of the coat of arms. The oeuvre was dedicated and destined to the ruler and his court. Thus, apart from the publication of this important treatise, we also would like to explore how and why the mathematical puzzles were a topic of interest in Renaissance Florence, especially in the circle of Giuliano de Medici.

Linguistic interests will lead us to the history of language; we will comprehensively analyze the language used by Piero da Filicaia in order to engage the Medici court with the mathematical puzzles.