

## *Science et Répresentations*

### Colloque International en mémoire de Pierre Souffrin

Veronica Gavagna

#### *I problemi dell'edizione degli scritti euclidei di Maurolico*

The collection of Maurolico's writings related to the *Elements* includes documents of various kinds: printed editions, holograph drafts, re-readings, reworking, compendia and numerous related fragments. A chronological ordering of the survived material leads, in the first instance, to classify the writings into two major groups: the texts written during the years 1532-1541 and the compendia of the years 1563-1567.

The Maurolican editions of 1530's and 1540's essentially appear to be a critical merging of the traditions by Campanus and Zamberti; nevertheless, sometimes the author does not hesitate to replace Euclidean proofs with more easily intelligible ones (from his point of view, of course) or to add new propositions when he thinks incomplete the Euclidean theory. Although these writings are clearly not based on any kind of philological restoration of Euclid, they are not significantly far from the spirit of the *Elements*.

The *Compendia* of the Sixties are not only a reasoned synthesis of the *Elements*, because they are completely influenced by a deep arithmetical interpretation of the topics, from the theory of proportions to the relationships between regular polyhedra. Following this peculiar approach, Maurolico often chooses to replace, where possible, geometrical proofs with arithmetical

ones. The compendia of the fifteen books of the *Elements* - grouped on the basis of the autograph instructions left by Maurolico - show tracts of deep originality, but at the same time they constitute a very heterogeneous work, as their complex genesis testifies.

The Euclidean writings as a whole, set different kind of problems: although the textual tradition is rather poor, the edition of these works has to include partial redactions of the *Elements* «ex traditione Maurolyci», compendia written on different periods and many related fragments. The difficulty of placing such different texts into a coherent framework does not only regard the editorial aspect, but also and especially the interpretative one.

The crucial points are, first of all, a reliable reconstruction of the two different Euclidean projects undertaken by Maurolico, and a precise evaluation of the actual influence of the Euclidean edition on his scientific production, especially concerning the close relations existing among arithmetical and Euclidean writings: the first step to reach this aim is, obviously, the critical edition of the Euclidean texts.