Educating the Architect: The Scientific Agenda of Vitruvius’ *De Architectura*

If Marcus Vitruvius Pollio (V.) could visit a modern-day school of architecture and design, he might be proud of what he found. In the first book of his treatise *De Architectura* (1.1.3–10), V. stipulates an ambitious educational program, an ἐγκύκλιος παιδεία, for the architect that includes broad training in disciplines ranging from medicine, geometry, and harmonics to history and natural philosophy (Geertman 1994: 11–13, Masterson 2004: 392–5). This lofty requirement depends on V.’s claim (1.1.1) that architecture is composed not only of ‘construction’ (fabrica), but also ‘theorizing’ (ratiocinatio). The complete architect must be able ‘to demonstrate and explain constructions in accordance with reason and skill’ (res fabricatas sollertiae ac rationis pro portione demonstrare atque explicare). V.’s emphasis on ratiocinatio as a component of architecture is fundamental to his project: it opens up a space for discussion of architecture’s methods and principles, ties it to other branches of scientific and technical knowledge that will furnish it with explanations, and sets the discipline on a rigorous theoretical basis. The obvious importance of ratiocinatio notwithstanding, it is by no means certain what its constituent activities of ‘demonstration’ (demonstrare) and ‘explanation’ (explicare) are. Interpreters have seen them as an *a posteriori* justification for architectural practice (cf. Callebat 1994: 35), or as a coordinated effort to communicate a broader, theoretical worldview to readers (Courrént 2005). In this paper, I survey the question and propose a third (but not mutually exclusive) alternative: the terms highlight the *scientific agenda* of *De Architectura*, namely, the proposal of a flexible system for deriving architectural practice from secure natural principles. The architect’s broad theoretical training is thus preparatory for a new conception of practice that requires the active use of experiment, observation, and reasoning drawing on the principles (rationes) afforded by other branches of knowledge.

**Bibliography**


**AV Needs**

I plan to use PowerPoint in order to show images relevant to the paper, and would thus request access to a projector or screen.