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Design and tracing of post-Byzantine churches in the Florina area, Northwestern Greece.

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Summary: This paper constitutes an effort to investigate the application of specific design and constructional tracing in post-Byzantine churches situated in northwestern Greece, mainly in the wider area of the town of Florina and the Prespa Lakes, covering a period from the fifteenth to the nineteenth century. Firstly, a review of the relevant previous studies concerning the investigation of proportions and constructional tracing in Byzantine churches is presented. Secondly, a brief analysis of the metric systems of the Byzantine and the Ottoman period is given in order to define the applied modules. Furthermore, the typology of post-Byzantine churches is analysed. The main part of the paper includes the investigation of the constructional grid and the proportions in several plan drawings, in combination with the use of triangular tracing (right triangles). The analysis is also extended to façades and sections, in order to demonstrate the standardisation of the construction. Apart from the above, the application of the golden section in some examples is also examined. Finally, conclusions are drawn concerning the design and application of models and tracing on the construction of post-Byzantine churches.

Classification: M80

Keywords: architect's cubit; Byzantine foot; design analysis; Florina area; northwestern Greece; post-Byzantine period; single-nave church; three-aisled basilica; structural systems; symbolism; ad quadratum; ad triangulum; diagonals; geometry; geometric systems; golden section; harmonic proportions; irrational numbers; measuring systems; module; proportion; proportional systems; symmetry
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