Inserting new technologies in undergraduate architectural curricula

A case study

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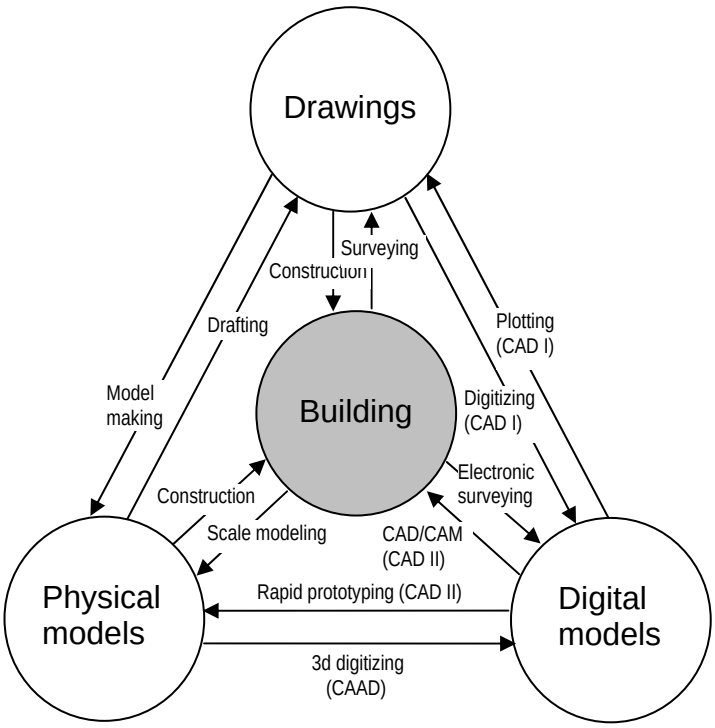

Fig. 1. A design studio fully integrating traditional and digital media (Adapted from Mitchell and McCullough, 1994)

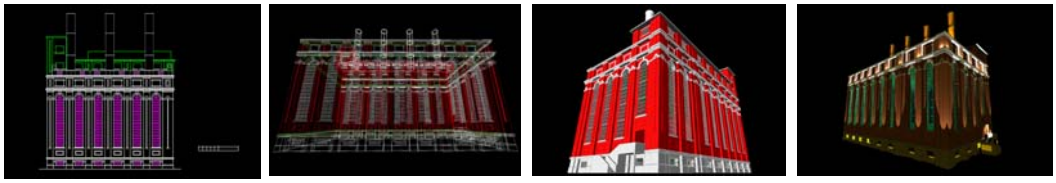

Fig. 2. CAD I: Geometric Modeling and visualization. Central Tejo, Lisboa (Eduardo Costa, 2001/02): from the 2d to the photorealistic model

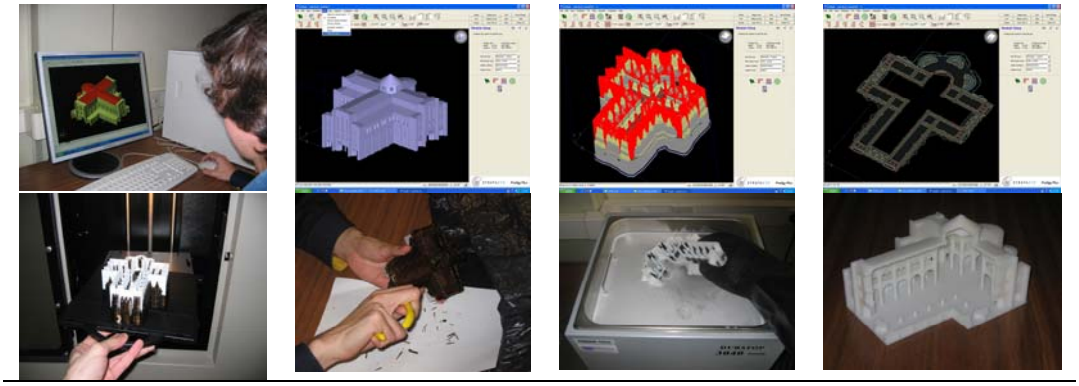

Fig. 3. CAD II: programming and fabrication. Program for generating Romanesque churches (Ricardo Mesquita, 2003/04): from the digital model to the 3d physical model produced by FDM

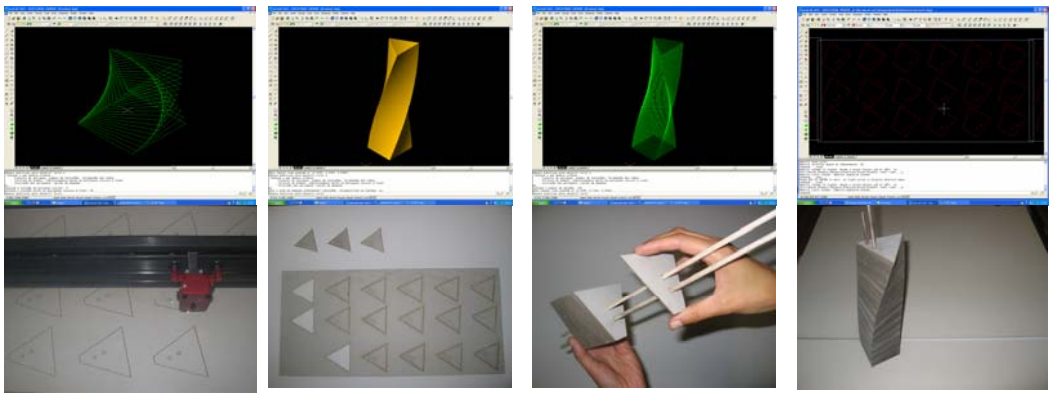

Fig. 4. CAD II: programming and fabrication. Program for generating 3D complex tower buildings through the manipulation of polygons and producing the information required for making the physical model using a laser-cutter (Júlio Luta e Luís Marques, 2005/06)

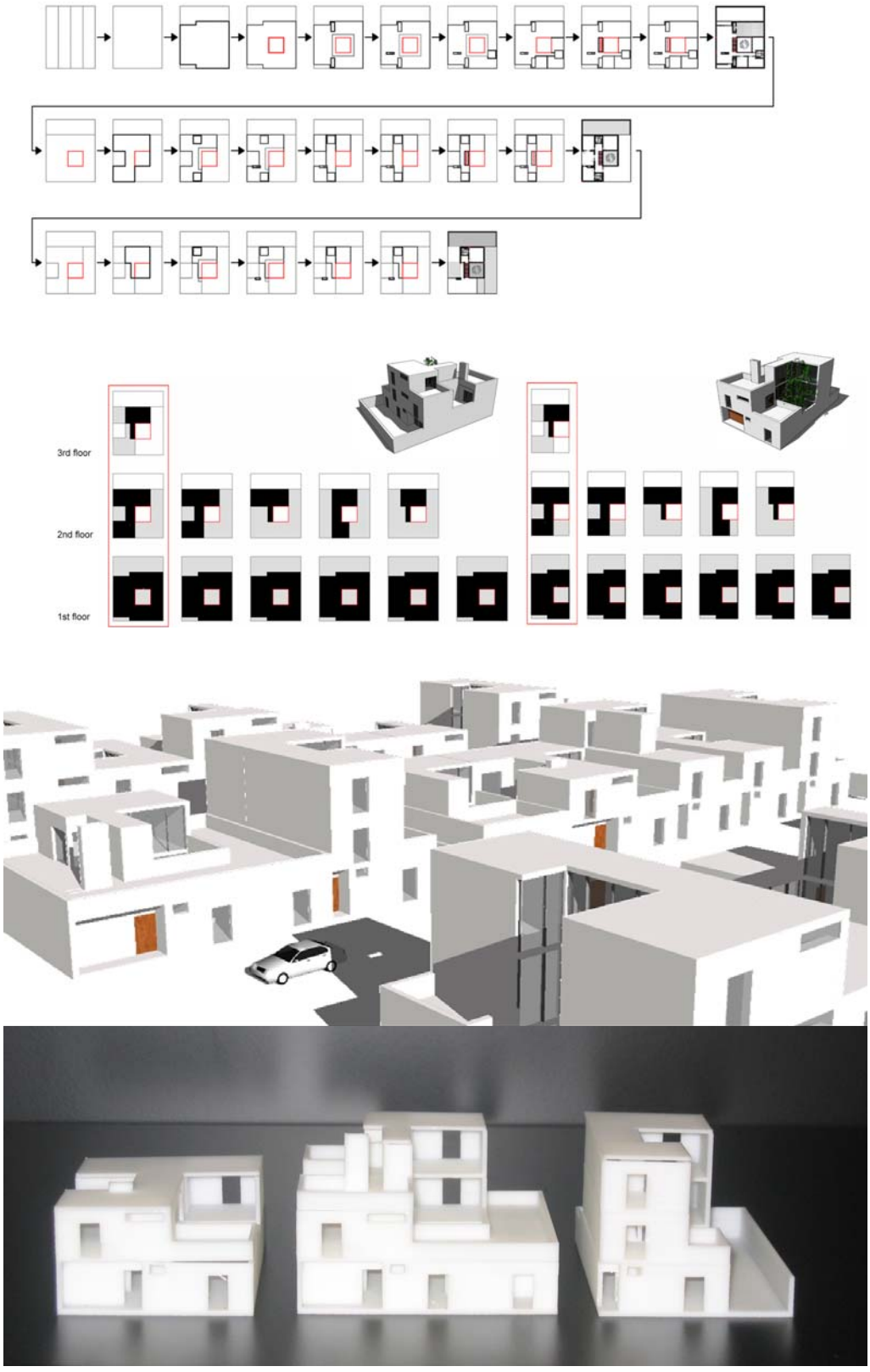

Fig. 5. CAAD: Computer Aided Architectural Design. Design system for customized housing conceived by programming it in Autolisp. (Luís Rasteiro,

Joana Pimenta, and Pedro Barroso 2005/06). *Explanation of how rules are applied in the generation a solution, partial universe of design solutions, view of a street generated using the program, and FDM models of solutions.*

Fig. 6. ISTAR, IST Architecture Research Laboratories: views of the advanced geometric modeling, rapid prototyping, remote collaboration, and virtual reality facilities included in the computational architecture laboratory