Transformations on Parametric Design Models

A case study on the Sagrada Familia Columns

Carlos Roberto Barrios
Department of Architecture
Massachusetts Institute of Technology
Design with **Parametric Models**

- **Parametric Variations**
  - [Diagram]

- **Parametric Combinations**
  - [Diagram]

- **Parametric Hybrids**
  - [Diagram]
Modeling Procedures
Generation of Gaudinian Column
Modeling Procedure for columns
Comparison
Rectangular Knot
Square Column
Instances of the Modeling Procedure
New Designs
New Designs
Designing with Procedural models

- Increase design space
- Propagate changes
- Reusability
- Interactive feedback
- Complexity
- Duplication
Aknowledgements

Bill Mitchell, MIT
Larry Sass, MIT
Ike Colbert, MIT
Mark Buny, RMIT
Jordi Fauli, JCSA
Jordi Cusso, JCSF