Beyond Beauty: Reexamining Architectural Proportion in the Basilicas of San Lorenzo and Santo Spirito in Florence

PROEFSCHRIFT

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof. mr. P.F. van der Heijden,
volgens besluit van het College voor Promoties
te verdedigen op dinsdag 15 november 2011
klokke 13:45 uur

door

Matthew A. Cohen
geboren te New York, USA
in 1962
Promotiecommissie

Promotor: Prof. dr. C.A. van Eck

Leden: Prof. dr. A.F.W. Bosman (Universiteit van Amsterdam)
       Prof. dr. H. Burns (Scuola Normale Superiore di Pisa)
       Prof. dr. ir. M.J.F. Delbeke (Universiteit Leiden / Universiteit Gent)
       Prof. dr. C.M. Elam (Harvard Center for Italian Renaissance Studies, Florence)
Beyond Beauty:
Reexamining Architectural Proportion in the Basilicas of
San Lorenzo and Santo Spirito in Florence

Acknowledgements

1. Introduction.................................................................................................................1
   1.1 Definitions
   1.2 The Wittkower Paradigm
   1.3 Summary of Chapters
   1.4 Previously Published and New Sections

2. Sets of Proportions in the San Lorenzo Nave Arcade Bays (with a Santo Spirito
   Comparison)...........................................................................................................29
   2.1 Methodology
   2.2 Refining the Data: Metrical Observations
   2.3 Refining the Survey Data: Sculptural Observations
   2.4 Geometry
   2.5 Number
   2.6 Arithmetic
   2.7 The Column Shaft and Entablature Block Height Discrepancies

3. Sets of Proportions in the Overall Basilica of San Lorenzo (including the Old
   Sacristy) .................................................................................................................66
   3.1 Methodology
   3.2 Proportional Building Blocks
   3.3 Reconstruction of the Basilica Design Process
   3.4 Cross-Section Proportions
   3.4 The Old Sacristy
   3.5 Symbolic Numbers and Entablature Block Frieze Reliefs

4. The Construction History of the Fifteenth-Century Basilica of San Lorenzo:
   A Proposed Narrative............................................................................................107
   4.1 Methodology
   4.2 The Old Basilica of San Lorenzo
   4.3 The Authorship Question
   4.4 Construction History of the Fifteenth-Century Basilica
   4.5 Conclusion

5. Medieval Origins.....................................................................................................200
   5.1 The Lombard Connection
   5.2 Santa Maria del Fiore

6. Alternatives to the Wittkower Paradigm.................................................................240
   6.1 The Crosby Thesis Instead of Geometry vs. Number
   6.2 Rhetorical rather than Aesthetic Interpretations
   6.3 A Disciplinary Triad

7. Epilogue: Proportional Aesthetic Mysticism (P.A.M.)...........................................273
8. Appendices............................................................................................................................. 281
   8.1 San Lorenzo Survey
   8.2 Old Sacristy Survey
   8.3 Santo Spirito Survey
   8.4 Statistical Analysis
   8.5 Serlio Drawing Measurements
   8.6 Regesto of Documents

9. Figures

10. Bibliography
Acknowledgements

The research presented here would not have been possible without the varied support of numerous individuals and organizations, including James S. Ackerman, Pietro Ruschi, Daniel L. Schodek, Eduard F. Sekler and Jorge Silvetti; the Soprintendenza per i Beni Architettonici e per il Paesaggio per le Provincie di Firenze, Pistoia e Prato for allowing me access to the basilica of San Lorenzo and the use of a lightweight mobile scaffolding from November 1991 through June 1992; Prior Mons. Angelo Livi and the chapter of San Lorenzo for their collaboration; the chapter of Santo Spirito and the Ufficio Belle Arti del Comune di Firenze, in particular Claudio Cestelli, Paolo Fiorini, and Paolo Ferrara, for granting me access to the basilica of Santo Spirito in June 1992 and permission to erect scaffolding therein; the Opera di Santa Maria del Fiore and geom. Paolo Bianchini, Responsabile del Ufficio Tecnico for permission to measure the Basilica of Santa Maria del Fiore and obtain access to the ballatoio and roof; the Graham Foundation for Advanced Studies in the Fine Arts for its generous support in 1991 and 2002; Washington State University, for awarding me a New Faculty Seed Grant from the WSU Foundation and the Office of the Vice Provost for Research in 2005; the Kunsthistorisches Institut in Florenz, for allowing me access to their library and facilities; Francesco Benelli, Caroline Elam, David Wang and Jack Wasserman for many useful and challenging comments on various portions of the text; and others including: Anja, Oronzo Brunetti, Nicoletta Carniel, Rudy Cocco, Deirdre Force, Kirsten Garz, Tommaso Gori, Phil Gruen, Amy Larsen, Eva Mussotter, Giacinto Russo, Carla Schmitzfurder, Michele Serviente, Matthias Feldmann, Stefano Guiducci and Ursula Winkler for their assistance with measuring and other aspects of this research.

I extend special thanks to the following three individuals: Chester H. Liebs, who taught me how to read the built environment, and thereby encouraged me to study architecture based on observation; Howard Burns, who recognized the potential of this research in an early stage and has advised and encouraged me throughout the long process of its development; and Caroline van Eck, my dissertation advisor who continues to challenge my understanding of architecture, proportion and aesthetics.

Finally, I thank Crystal Gartner, whose support and encouragement in so many ways has inspired me to think creatively.