The foundation, planning and building of new towns in the 13th and 14th centuries in Europe: an architectural-historical research into urban form and its creation
Boerefijn, W.N.A.

Citation for published version (APA):
Boerefijn, W. N. A. (2010). The foundation, planning and building of new towns in the 13th and 14th centuries in Europe: an architectural-historical research into urban form and its creation
CONTENTS

PREFACE

0  INTRODUCTION
  0.1 Cultural change in Europe in the 11th to 14th centuries
     0.1.1 New town foundation
     0.1.2 Conditions that made possible the revival of urban culture
     0.1.3 Inward and outward colonisation
     0.1.4 New settlements and new economy
     0.1.5 End of the high-period of town foundation
  0.2 Objects, layout and sources of this study
     0.2.1 Objects
     0.2.2 Selection of material and layout of this dissertation
     0.2.3 Sources
  0.3 Definitions
     0.3.1 Definition of the term ‘town’
     0.3.2 Definition of the term ‘new town’
  0.4 Historiography
     0.4.1 Historiography and source material
     0.4.2 Typological classification

PART I: CASE STUDIES

1  THE NEW TOWNS OF KING EDWARD I IN WALES
  1.1 Introduction: geography and history
     1.1.1 Norman conquest
     1.1.2 Reconquest by Welsh rulers
     1.1.3 Anglo-Norman (re-)conquests
  1.2 Urban prelude: new town foundations before King Edward I
     (second half of the 11th century to c.1270)
  1.3 King Edward I’s conquest of northern Wales and town foundations
  1.4 Motives
     1.4.1 Military motives
     1.4.2 Economic motives
  1.5 Settlers
  1.6 Planners
  1.7 Survey of the Edwardian boroughs of northern Wales
     1.7.1 Flint
     1.7.2 Rhuddlan
     1.7.3 Aberystwyth
     1.7.4 Conwy
     1.7.5 Caernarfon
     1.7.6 Harlech
     1.7.7 Criccieth
     1.7.8 Bere
     1.7.9 Caerwys
     1.7.10 Beaumaris
     1.7.11 Newborough
  1.8 General spatial aspects of the Edwardian towns in Wales
     1.8.1 Locations
1.8.2 Urban layout
  1.8.2.1 Outline forms and relief
  1.8.2.2 House lots
  1.8.2.3 Streets
1.8.3 Architectural elements
  1.8.3.1 Town defences
  1.8.3.2 Castles
  1.8.3.3 Ecclesiastical houses
  1.8.3.4 Town halls
  1.8.3.5 Houses
1.9 End of the high-period of town foundation
1.10 Conclusion

2 THE BASTIDES OF SOUTHWEST FRANCE
2.1 Introduction: geography and history
  2.1.1 Territorial and political history
2.2 The term ‘bastide’
2.3 Origins: colonisation and settlement foundations in southwestern France, 12th-13th centuries
  2.3.1 Sauvetés
  2.3.2 Castelnau
2.4 Bastides: chronology and founders
  2.4.1 Bastide-foundations under Count Raymond VII of Toulouse
  2.4.2 Bastide foundations in ‘paréage’
  2.4.3 Bastide foundations under Alphonse de Poitiers
  2.4.4 Bastide foundations under the English king-dukes
  2.4.5 Bastide foundations under the French kings
  2.4.6 Bastide foundations by smaller lords
  2.4.7 End of the period of bastide foundations
2.5 Motives for the foundation of bastides
  2.5.1 Military motives
  2.5.2 Protection of population and travelers
  2.5.3 Administrative motives
  2.5.4 Economic motives
    2.5.4.1 Markets
    2.5.4.2 Farming out revenues
    2.5.4.3 Bastide foundations by Cistercian abbeys
    2.5.4.4 Reorganisation of the economy and agrarian structures
    2.5.4.5 Viticulture and wine trade
  2.6 Actions preceding the foundation of bastides and foundation rituals
2.7 ‘Chartes de coutumes’
2.8 Settlers
2.9 Planners
2.10 Spatial aspects of the bastides
  2.10.1 Locations
  2.10.2 Setting out the allotment
  2.10.3 Historiography of the urban form of bastides
    2.10.3.1 The ‘archetype’ of the bastides
    2.10.3.2 Typologies
  2.10.4 Urban layout
    2.10.4.1 General plan forms of the original plantations
    2.10.4.2 Outline forms
    2.10.4.3 Relief
    2.10.4.4 House lots
    2.10.4.5 Street blocks
    2.10.4.6 Streets
2.10.4.7 Market places 143
2.10.5 Architectural elements 146
  2.10.5.1 Town defences 146
  2.10.5.2 Castles 147
  2.10.5.3 Ecclesiastical houses 147
  2.10.5.4 Market halls and town halls 151
  2.10.5.5 Houses 152
2.10.6 Spatial structures of extra-urban town grounds 154
2.11 Conclusion 157

3 THE FLORENTINE TERRE NUOVE 161
3.1 Introduction: geography and history 161
  3.1.1 Florence and the countryside 163
3.2 Origins: the decades preceding the creation of the terre nuove 164
  3.2.1 The political situation in Florence in the late 13th century: Guelphs and Ghibellines 164
  3.2.2 Earlier town foundations by other city-states of northern and central Italy 166
3.3 The Florentine new town foundations in contemporary documents 166
3.4 The term terre nuove fiorentine 168
3.5 Motives for the foundations of the terre nuove 169
  3.5.1 Military motives 170
    3.5.1.1 Fighting the rebels and gaining control over the contado 170
    3.5.1.2 Fortificatory function 170
    3.5.1.3 Guarding the main routes and protecting travellers 171
  3.5.2 Dispossessing the rebels of their subjects and land, and enlarging the territory 171
  3.5.3 Administrative function 172
  3.5.4 Economic motives 172
  3.5.5 The official main motive versus economic motives 173
3.6 Settlers 174
3.7 Planners 175
3.8 Survey of the terre nuove fiorentine 176
  3.8.1 Castelfranco di Sopra 176
  3.8.2 San Giovanni Valdarno 181
  3.8.3 Scarperia 186
  3.8.4 Firenzuela 191
  3.8.5 Terranuova Bracciolini 195
  3.8.6 Giglio Fiorentino 198
3.9 General spatial aspects of the terre nuove 202
  3.9.1 The locations 202
  3.9.2 Urban layout 203
    3.9.2.1 General plan form of the original plantations 203
    3.9.2.2 Outline forms and size 203
    3.9.2.3 Relief 204
    3.9.2.4 Streets 204
    3.9.2.5 Piazzas 205
    3.9.2.6 House lots 206
    3.9.2.7 Gardens 206
  3.9.3 Architectural elements 207
    3.9.3.1 Town defences 207
    3.9.3.2 Ecclesiastical houses 209
    3.9.3.3 Town halls 209
    3.9.3.4 Public loggias 210
    3.9.3.5 Houses 210
3.10 Conclusion 212
4 COMPARISON OF THE THREE GROUPS OF NEW TOWNS

4.1 Founders

4.2 Motives

4.3 Settlers

4.4 Locations

4.5 Urban form

4.5.1 Differences in regularity

4.5.2 Defences

4.5.3 House lots

4.5.4 Market places

4.6 Similarities

PART II: ASPECTS OF NEW TOWN CREATION

5 THE SITING OF NEWLY FOUNDED AND TRANSPLANTED TOWNS

5.1 Aspects of general importance in the siting of new towns

5.1.1 Defence

5.1.2 Water

5.1.3 Roads

5.1.4 Mutual distance and centrality

5.1.5 Possession of the ground

5.1.6 Pre-urban settlement nuclei

5.2 High and low sites

5.2.1 Prevention of flooding

5.3 Settlement transplantations

6 THE USE OF GEOMETRY IN THE DESIGN OF NEW TOWN PLANS IN THE HIGH-PERIOD OF TOWN FOUNDATION

6.1 Arithmetic design of urban plans by use of rational dimensions, and reconstruction of original town plans by metrological analysis

6.2 Design of urban plans by complex geometry

6.3 Various theories of complex design geometry in the plans of newly created towns

6.3.1 Pythagorean triangles in the design of bastide plans

6.3.2 Rotated squares in the design of bastide plans

6.3.3 Complex geometry in the design of the bastide of Grenade-sur-Garonne

6.3.3.1 Metrological analysis of the plan of Grenade-sur-Garonne

6.3.4 Complex geometry in the design of various town plans according to Humpert and Schenk

6.4 Complex geometry in the town plan design of the terre nuove fiorentine

6.4.1 Theories regarding the method of design of the terre nuove-plans

6.4.1.1 Guidoni

6.4.1.2 Friedman

6.4.1.3 Pirillo

6.4.1.4 Other theories on the design of the terre nuove-plans

6.4.2 Analysis of the theories of Guidoni, Friedman and Pirillo in comparison to the terre nuove plans

6.4.3 The inspiration for the geometric method used in the terre nuove plan designs and the way it was handled

6.4.3.1 Possible sources of inspiration for the proposed geometric design method of the terre nuove plans

6.4.3.2 How was the design geometry handled?

6.4.4 The motive for the use of design geometry in the terre nuove plans

6.5 Complex geometry versus simpler methods of planning, and modern ideas on ‘medieval design’

6.6 Conclusion
12 ABSTRACT AND CONCLUDING REMARKS

12.1 Abstract 424

12.2 Concluding remarks 440

12.2.1 Creating an overview of complex history: how historical generalisations led to erroneous ideas about the history of town building 440
12.2.2 Individual cases versus general conclusions and classifications 441
12.2.3 Different perceptions of urban design in the 12th to 15th centuries 442
12.2.4 General motives for town foundation and the international system of market trade 443
12.2.5 General remarks on the results of this study 444
12.2.6 Suggestions for further research 445

Appendix A DESCRIPTION OF THE PROJECT FOR THE NEW TOWN OF GIGLIO FIORENTINO, 19 MAY 1350 448

Appendix B DETAILED ANALYSIS OF VARIOUS THEORIES OF COMPLEX GEOMETRIC DESIGN OF THE TERRE NUOVE PLANS (extended version of paragraphs 6.4.1 - 6.4.2) 450

B.1 Method of analysis of theories concerning the design method 450

B.2 Description and analysis of various theories of lesser importance 451

B.2.1 Higounet 451
B.2.2 Buselli 451
B.2.3 Baldari 456
B.2.4 Van den Heuvel 458
B.2.5 Bartoli 458
B.2.6 Bertocci 459

B.3 Detailed analysis of the theories of Guidoni, Friedman and Pirillo in comparison to the terre nuove plans 460

B.3.1 Terranuova Bracciolini 460
B.3.2 San Giovanni 464
B.3.3 Castelfranco di Sopra 468
B.3.4 Scarperia 470

B.4 Comparison between the terre nuove 472

Appendix C STANDARD DIMENSIONS OF HOUSE LOTS ACCORDING TO DOCUMENTS AND RECONSTRUCTIONS 475

BIBLIOGRAPHY 481

BEKNOPTE SAMENVATTING 515